CLERK'S COPY. 22869

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1902.

No. 193.

THE SAN DIEGO LAND AND TOWN COMPANY, APPELLANT,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, JOHN GRIFFIN, AND HOWARD M. CHERRY (MEMBERS OF AND CONSTITUTING THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA), AND M. T. HALL ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF CALIFORNIA.

FILED NOVEMBER 18, 1901.

(18,321.)

R

(18,321.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1902.

No. 193.

THE SAN DIEGO LAND AND TOWN COMPANY, APPELLANT,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, JOHN GRIFFIN, AND HOWARD M. CHERRY (MEMBERS OF AND CONSTITUTING THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA), AND M. T. HALL ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF CALIFORNIA.

INDEX.

	Original.	Print.
Caption	1	1
Enrolled papers	2	1
Bill of complaint	2	1
Subpœna and return	24	14
Demurrer of James A. Jasper *et al.* to bill of complaint	27	15
Demurrer of M. T. Hall *et al.* to bill of complaint	32	17
Exceptions to bill of complaint	36	20
Confession of exceptions	42	23
Order overruling demurrers and exceptions	44	24
Answer of defendants	46	24
Replication	70	38
Order *pro confesso*	72	38
Enrollment	75	40
Decree	78	41
Opinion on exceptions	81	42
Opinion on the merits	97	51

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., AUGUST 12, 1902.

	Original.	Print
Report of testimony taken before Geo. J. Leovy, special examiner.	125	67
Stipulations as to taking testimony	129	68
Deposition of Howard M. Cherry (on behalf of complainant)	129	69
Findings of board of supervisors	136	73
Computations produced by H. M. Cherry	138	75
Deposition of Alfred Haines (on behalf of complainant)	156	85
Deposition of Victor E. Shaw (on behalf of complainant)	176	97
Stipulation as to preparation of petition and as to fee	180	100
Deposition of H. N. Savage (on behalf of complainant)	181	100
Notice to water-consumers	195	108
Deposition of John E. Boal (on behalf of complainant)	201	112
Card as to collection of water rent	213	119
Deposition of H. N. Savage (recalled)	218	122
Deposition of A. Haines (recalled)	227	127
Exhibits Nos. 1 to 4—Statements	229	128
Deposition of Thomas R. Williams (on behalf of defendants)	238	132
Elisha M. Gavin (on behalf of defendants)	241	135
William F. Stearns (on behalf of defendants)	245	137
George Daschbach (on behalf of defendants)	250	139
William F. Stearns (recalled)	251	140
John E. Boal (recalled)	252	141
Form of apportionment agreement	254	142
Deposition of C. A. Whittemore (on behalf of defendants)	257	144
John Crellin (on behalf of defendants)	259	145
John E. Boal (recalled)	261	146
Frank Palmer (on behalf of defendants)	262	147
S. W. Haines (on behalf of defendants)	264	148
John E. Boal (recalled)	270	151
Agreement of April 6, 1899	274	153
Deposition of Charles D. Lanning (on behalf of complainant)	278	156
Circular to shareholders	284	160
Deposition of L. F. Doolittle (on behalf of complainant)	304	172
John E. Boal (recalled)	321	182
H. N. Savage (recalled)	326	185
A. H. Koebig (on behalf of complainant)	342	194
Stipulation as to statements made by Savage to Koebig	398	227
Stipulation as to number of gallons allowed to the acre	399	228
Stipulation as to estimate of $180,000	409	234
Deposition of John E. Boal (recalled)	410	235
A. H. Koebig (recalled)	410	235
Charles D. Lanning (recalled)	421	241
Fred Copeland (on behalf of defendants)	427	244
H. N. Savage (recalled)	431	246
S. A. Dale (on behalf of defendants)	441	253
George Daschbach (recalled)	447	256
A. C. Crockett (on behalf of defendants)	448	256
Stipulation as to transcript of evidence taken and exhibits placed in evidence before the board of supervisors	449	257
Extract from decree in case of San Diego Land and Town Company *vs.* Osborne *et al.*, No. 671, in United States circuit court, southern district of California	451	258
Deposition of Henry Gulick (on behalf of defendants)	453	259
Deposition of John E. Boal (recalled)	459	263
Certificate of special examiner	460	263

	Original.	Print
Evidence taken before the board of supervisors of San Diego county in the matter of fixing rates of San Diego Land and Town Company	462	263
Proceedings, &c	464	264
Deposition of J. D. Schuyler	493	282
J. D. Schuyler (resumed)	528	305
John E. Boal	557	357
John E. Boal (recalled)	662	392
H. N. Savage	692	411
H. N. Savage (recalled)	716	426
John E. Boal (recalled)	750	449
Francis S. Earle	780	468
John E. Boal (recalled)	789	474
Ira Howe	789	474
C. L. Josselyn	792	476
N. H. Downs	799	481
John M. Ballou	801	482
C. H. Rippey	803	483
Fred Copeland	810	487
C. S. Alverson	819	493
John E. Clouse	857	518
Henry Gulick, Jr.	859	513
C. H. Stuart	865	529
John E. Boal (recalled)	868	525
H. N. Savage (recalled)	881	534
John E. Boal (recalled)	885	537
H. N. Savage (recalled)	887	538
Payne Brown	888	539
Complainant's Exhibit No. 1—Tabulated statement of Sweetwater dam, pipe lines, etc. (being L. & T. Co.'s Ex. No. 1 in proceedings before board of supervisors)	894	542
No. 2—Statement of water rents received, etc. (being L. & T. Co.'s Ex. No. 2 in proceedings before board of supervisors)	896	543
No. 3—Tabulated statement, maintenance of Sweetwater dam, pipe lines, etc. (being L. & T. Co.'s Ex. No. 3 in proceedings before board of supervisors)	897	544
No. 4—Statement of water rents received, etc. (being L. & T. Co.'s Ex. No. 4 in proceedings before board of supervisors)	898	545
J[1]—Reorganization and agreement circular	899	545
J[3]—Circular of December 9, 1895, issued by S. D. L. & T. Co	915	554
J[4]—Tabulated statement of cost of various systems	917	556
Defendants' Exhibit J[3]—Certificate of organization of corporation	919	557

	Original.	Print
Stipulated Exhibit No. 1—Form of water-right contract (being Protestants' Exhibit B in proceedings before board of supervisors)	923	559
No. 2—List of water rates promulgated by S. D. L. & T. Co., January 1, 1896 (being Petitioners' and Protestants' Exhibit C before the board of supervisors)	929	562
No. 3—Rules and regulations of the S. D. L. & T. Co.'s water supply (being Petitioners' and Protestants' Exhibit D before the board of supervisors)	934	565
No. 4—Advertising folder of S. D. L. & T. Co. (being Protestants' Exhibit D before the board of supervisors)	951	574
No. 5—Copy of pages 14 and 16 of Eighth Annual Report of Board of Directors of S. D. L. & T. Co. (being Petitioners' Exhibit L before board of supervisors)	956	578
No. 6—Copy of decree of foreclosure, etc., in case of Mandell *et al. vs.* S. D. L. & T. Co., No. 660 in United States circuit court, southern district of California (being Petitioners' Exhibit X before board of supervisors)	960	580
Assignment of errors	974	588
Appeal and allowance	976	589
Order allowing appeal for transcript of record and approving bond	978	590
Bond on appeal	979	590
Clerk's certificate to transcript	982	592
Citation and service	984	593

1 In the Circuit Court of the United States of America of the Ninth Judicial Circuit in and for the Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM Justice, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants. } No. 768.

2 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, William Justice, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants. } Bill in Equity.

3 To the honorable the judges of the circuit court of the United States within and for the southern district of California:

The San Diego Land & Town Company, a corporation duly organized and existing under and by virtue of the laws of the State

of Maine, and a resident and citizen of said State, brings this its bill against James A. Jasper, Charles H. Swallow, William Justice, John Griffin and Howard M. Cherry, (members of and constituting the board of supervisors of the county of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Renford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, residents and citizens of the county of San Diego, State of California, and of the district aforesaid.

And your orator complains and says that — is and was at all times herein mentioned, after the 30th day of June, 1897, a corporation duly organized and existing under and by virtue of the laws of the State of Maine, and doing business in the State of California; that it is and has been during said time the owner of valuable water, water rights, reservoirs, and an entire water system for furnishing water to consumers for domestic, irrigation and other purposes for which water is needed for consumption, and of a franchise for the empounding, sale, disposition and distribution of the waters owned and stored by it to consumers under said system inside and outside of the city of National City, in said county and State.

4 That its main reservoir and supply of water is and was at the times hereinafter mentioned, situate on the Sweetwater river, so called, a small stream in said county about five miles distant from the city of National City, and its system of reservoirs, mains, flumes, aqueducts and pipes cover and can supply but a limited amount of territory consisting in part of certain farming lands within and outside of National City, and in part of the residence portion of said city of National City.

That your orator and its predecessors in ownership of said property hereinafter mentioned, in procuring the water and water rights, reservoirs and distributing system owned by your orator as aforesaid and preparing itself to supply consumers with water, expended, up to October 4th, 1897, the sum of $1,026,022.79; that of said amount there was expended the sum of $65,000.00 for the enlargement and extension of said system by constructing what is known as "pipe line No. 2," and all of said expenditures were reasonably necessary for the purposes of furnishing and supplying water to the consumers now taking water from said system, and said system and the whole thereof is now actually used and useful to the appropriation and furnishing of such water to said consumers.

That by the expenditure of said large sum your orator and its predecessors in ownership of said property have procured and your orator now owns water, water rights and reservoir site, and a reservoir of the capacity of 600,000,000 gallons of water, and have constructed and laid therefrom its water mains necessary to supply said consumers, including the city of National City and the country be-

tween its said source of supply and said city, with water, and have constructed and put in mains, pipes and all other necessary things to connect said water supply with the premises and buildings of said city and its inhabitants and with the houses and premises of consumers inside and outside of said city using water for the purposes of irrigation.

That the annual reasonable expenses of your orator, including the cost of repairs, management and operating such works, have not including replacement by reason of depreciation, amounted to not less than $20,000.00 per annum, and will amount to said sum, or more, for the coming year.

That the total receipts that can be derived by your orator from said plant and system, at the rates fixed by the ordinance hereinafter mentioned, and including all moneys received from the city of National City, and its inhabitants under rates fixed by the board of trustees of said city, will not exceed the sum of $25,000.00 per annum.

That the cost of putting in the said distributing system within the city of National City, and not including the cost incurred by it outside of the limits of said city, has amounted to the sum of $183,753.90, and all of the balance of said system is constructed outside of said city.

That in order to pay your orator the amount of its annual expenses and an income of six per cent. on the amount actually invested in its said water, water rights and water system up to the date of the passage of the ordinance hereinafter mentioned, it is necessary that such rates for water supplied and consumed be so fixed as to realize to your orator the sum of not less than $120,000.00.

That all of the mains and pipes of the complainant and other parts of its property so used in furnishing water to consumers, are perishable property and require to be replaced at least once in sixteen years, and require frequent repairs; that one of the large mains of the complainant used and necessary for supplying water to consumers has so depreciated as to render it necessary to replace a large portion thereof during the present year, at a cost to your orator of not less than $12,000.00, and there are other of the pipe lines of your orator that have so depreciated that it will be necessary to replace the same, at large expense, in the near future, and the annual depreciation of the entire system will amount to not less than $44,000.00.

That the amount that can be realized from the city of National City and its inhabitants per annum from the rates fixed by the board of trustees of said city, and now in force, has not heretofore and will not in the near future exceed the sum of $13,200.00.

That the value of the water, water rights, reservoirs, franchises and property necessary for the proper operation of its business and now owned by the complainant is $1,026,022.79.

That no other person or corporation is, or ever has been, furnishing a supply of water to the consumers supplied by your orator, nor is there now, nor has there been any other system of water works by which said consumers can be furnished with water, but the franchise

and right of the complainant to furnish water to said consumers is not exclusive of other persons or corporations.

And your orator further shows to the court that by the constitution and statutes of the State of California the use of all waters now appropriated, or that may be hereafter appropriated, for irrigation, sale, rental or distribution is declared to be a public use, and the right to collect rates or compensation for use of such water is declared to be a franchise, and that except when so furnished to any city and county, or town, or the inhabitants thereof, shall be regulated and controlled in the counties of said State by the several boards of supervisors thereof, in the manner prescribed by law.

It is further provided that whenever a petition of not less than twenty-five inhabitants, who are tax-payers of any county of
7 said State, shall, in writing, petition the board of supervisors therefor, said board shall fix and establish the rates to be charged by any corporation furnishing water as aforesaid.

It is further provided by the statutes of said State now in force as follows:

"SEC. 4. At the hearing of said petition the board of supervisors shall estimate, as near as may be, the value of the canals, ditches, flumes, water chutes, and all other property actually used and useful to the appropriation and furnishing of such water, belonging to and possessed by each person, association, company, or corporation, whose franchise shall be so regulated and controlled; and shall in like manner estimate as to each of such persons, companies, associations, and corporations, their annual reasonable expenses, including the cost of repairs, management, and operating such works; and, for the purpose of such ascertainment, may require the attendance of persons to give evidence, and the production of papers, books, and accounts, and may compel the attendance of such persons and the production of papers, books, and accounts, by attachments, if within their respective counties.

"SEC. 5. In the regulation and control of such water rates for each of such persons, companies, associations, and corporations, such board of supervisors may establish different rates at which water may and shall be sold, rented, or distributed, as the case may be; and may also establish different rates and compensation for such water so to be furnished for the several different uses, such as mining, irrigating, mechanical, manufacturing, and domestic, for which such water shall be supplied to such inhabitants, but such rates as to each class shall be equal and uniform. Said boards of supervisors,
8 in fixing such rates, shall, as near as may be, so adjust them that the net annual receipts and profits thereof to the said persons, companies, associations, and corporations so furnishing such water to such inhabitants shall be not less than six nor more than eighteen per cent. upon the said value of the canals, ditches, flumes, chutes, and all other property actually used and useful to the appropriation and furnishing of such water of each of such persons, companies, associations, and corporations; but in estimating such net receipts and profits, the cost of any extensions, enlargements, or other permanent improvements of such water rights or water works

shall not be included as part of the said expenses of management, repairs, and operating of such works, but when accomplished, may and shall be included in the present cost and cash value of such work. In fixing said rates, within the limits aforesaid, at which water shall be so furnished as to each of such persons, companies, associations, and corporations, each of said board of supervisors may likewise take into estimation any and all other facts, circumstances, and conditions pertinent thereto, to the end and purpose that said rates shall be equal, reasonable, and just, both to such persons, companies, associations, and corporations, and to said inhabitants."

9 And your orators further show to your honors that on the first day of September, 1897, the defendants M. T. Hall and others filed with the said board of supervisors a petition praying that said board regulate and control the rates and compensation to be collected by the complainant for water furnished by it outside of cities and towns within the county of San Diego, which petition was as follows:

"We, the undersigned, each of whom is an inhabitant, and each of whom is a tax-payer of said county of San Diego, State of California, hereby petition your honorable board in writing to regulate and control the rates and compensation to be collected within the said county of San Diego, (outside of any city or town therein) by the San Diego Land and Town Company, a corporation, organized under the laws of the State of Maine, for the sale, rental or distribution to any inhabitants of said county, (outside of any city or town therein), of the water of the Sweetwater river, in said county, by said corporation appropriated for irrigation, rental or distribution.

And your petitioners will ever pray.

M. T. HALL.
A. J. JENKINS.
E. P. VAUGHAN.
J. A. FRITZ.
P. H. EVANS.
THOMAS MAY.
LIZZIE BOWMAN.
JOHN SIRL.
JOHN C. MOORE.
G. D. WOOLSEY.
SAMUEL PEDLER.
COLONEL C. C. WINSLOW.
S. R. WILLIAMS.
10 JOS. HEFLIGER.
M. CHRISTIANSEN.
D. FREEMAN.
MARY E. SHARP.
D. C. COLLIER."
E. J. CAHILL.
BYRON GILLETT.
CHAS. W. SCHAFFER.
FREDERICK M. SMITH.
RANFORD WORTHING.
WILLIAM WEIDEKAMP.
G. L. GOOD.
WILLIAM ROCK.
C. P. JAMES.
THOS. J. HAYES.
WILLIAM BLACK.
A. C. MOUSER.
P. E. DAHLGRIST.
C. N. BOWERS.
HENRY LOHR.
G. Y. GRAY.
E. E. SHAFFER.

That the hearing of said petition was fixed for the 4th day of October, 1897, and due notice given thereof. That said petition came on regularly for hearing on said last-named date and there-

upon the consumers taking water from said system of the complainant filed with said board their protest as follows:

Claim and Protest.

"Before the board of supervisors of the county of San Diego.

In the Matter of the Application of Certain Inhabitants and Taxpayers to Fix Water Rates for the San Diego Land & Town Company.

To the honorable board of supervisors:

The present consumers of water for irrigation from the system of the San Diego Land and Town Company, who live outside of the city of National City, hereby allege and claim that each of them respectively has by purchase or otherwise become the owner of a right to the flow and use of so much of the water appropriated by said company for sale, rental and distribution as is necessary to irrigate his or her respective tracts of land under said company's system; that to each of said tracts of land the said company or its predecessor in title did, by its consent or voluntary act annex the easement of the right to the flow and use of water from said system for irrigation of such tract, in freehold; that each consumer has fully paid or otherwise satisfied said company and its predecessor for the full price and value of such water right; and that none of
11 such consumers, nor any of the lands of such consumers are liable to pay to said company any water rate other than their due proportion of the annual reasonable expenses of such company to cover the cost or repairs, management and operation of the works used and useful to the appropriation and furnishing of such water to such lands.

And each and all said consumers protest against the fixing of any rates as to them to provide or create net annual receipts and profits upon the value of said company's water system so used and useful for the appropriation and furnishing of such water to their respective lands.

HAINES & WARD,
C. H. RIPPEY,
Attorneys for said Consumers."

That your orator, by and through its general manager and chief engineer, furnished to said board full, complete, and accurate statements and proof of the value and cost of the dams, reservoirs, pipes, pipe lines and all other property actually used and useful to the appropriation and furnishing of such water belonging to and possessed by your orator, and also its annual reasonable expenses, including the cost of repairs, management, and operating its said works, and also the cost of all extensions, enlargements, and other permanent improvements of said water works and system.

That it was shown by said statements and proofs that the cost and value of said water works and system amounted to the sums hereinabove stated, that the annual reasonable expenses, including the cost

of repairs, management and operating its said works, and the cost of extensions and enlargements were as above alleged.

That no proof was made, or evidence given to the contrary
12 by the petitioners or any one else.

And your orator further shows that upon the conclusion of the evidence your orator requested said board in writing as follows:

"In the Matter of the Petition of M. T. HALL *et al.* for the Fixing of Rates to be Charged for Water Furnished by the San Diego Land and Town Company.

To the honorable board of supervisors of the county of San Diego, State of California:

The San Diego Land and Town Company respectfully requests: That in the fixing and determination of the rates to be charged by this company for water to be furnished to its consumers the board find and determine the following matters, to wit:

1. The value of the dam, reservoir, water rights and distributing system, and all other property actually used by said company, and useful to the appropriation and furnishing of such water.

2. The annual reasonable expenses of the company, including the cost of repairs, management and operating its works.

3. The cost of any extensions, enlargements or other permanent improvements of the water works of the company since the original construction of its plant.

4. The amount of depreciation of the plant of the company by natural wear from use and the action of the elements, either by way of percentage per annum of such deterioration, or the gross sum thereof for the years since the company commenced to furnish water.

5. The rates for irrigation necessary to be charged, together
13 with the domestic rates, in order to return to the company net annual receipts and profits of not less than six per cent. upon the value of its property as found by the board.

WORKS, WORKS & INGLE,
Attorneys for San Diego Land & Town Co."

But the said board wholly failed and refused to make the findings or determine the matters set forth in said request, or any or either of them, and your orator alleges that said board did not find or determine the value of the plaintiff's plant, system, and property, actually used and useful to the appropriation and furnishing of such water or the annual reasonable expenses of your orator, including the cost of repairs, management and operating said works, or at all, nor did said board determine or attempt to determine, the cost of any extensions, enlargements or other permanent improvements of the water rights or water works of your orator, nor did the said board in fixing said rates adjust or attempt to so adjust the same as that the net annual receipts and profits thereof to your orator would be not less than six per cent. on the value of its said water works and plant actually used and useful to the appropriation and

furnishing of such water to consumers, or any net annual receipt or profits whatever.

And your orator further shows to your honors that the said board, without finding or determining the matters and things they were required by law to find and determine, and without ascertaining, or attempting to ascertain, whether the rates fixed would return to your orator six per cent. net on the value of its plant, as required by law, passed and adopted an ordinance fixing the rates as follows:

"*Ordinance No.* 109.

14 In the Matter of the Adoption of Ordinance No. 109.

In this matter, being the adoption of ordinance No. 109, being an ordinance to fix and establish a maximum rate at which the San Diego Land and Town Company of Maine shall sell, rent or distribute the water now appropriated or that may hereafter be appropriated by it for irrigation, sale, rental or distribution to the inhabitants of said county of San Diego.

The board of supervisors of the county of San Diego, State of California, do ordain as follows:

That the following maximum rates are hereby fixed and established at which the San Diego Land & Town Company of Maine shall sell, rent or distribute the water now appropriated or that may hereafter be appropriated by it for irrigation, sale, rental, or distribution to the inhabitants of the said county of San Diego, to wit:

1. For water furnished to dwellings, tenement-houses, flats and other apartments, the same being occupied by not more than four persons, one dollar ($1.00) per month, and for each additional person ten cents (.10) per month.

2. For each bath-tub thirty ($.30) cents per month.

3. For each water-closet forty (.40) cents per month.

4. For each urinal twenty cents (.20) per month.

5. For each animal, horses, mules or cows: For the first two, four dollars ($4.00) each: for the third, three dollars ($3.00), and for each additional, two dollars ($2.00) per annum.

6. For hotels, lodging-houses, in addition to family rates, fifteen (.15) cents per month for each bed.

7. For boarding-houses, in addition to family rates, fifteen (.15) cents per month for each person.

15 8. For restaurants and coffee-houses, one dollar and fifty cents ($1.50) to three dollars and fifty cents ($3.50) per month.

9. For saloons and bars, one dollar and fifty cents ($1.50) per month.

10. For stores, one dollar ($1.00) to one dollar and fifty cents ($1.50) per month.

11. For offices, fifty cents (.50) to one dollar ($1.00) per month.

12. For dental rooms, one dollar ($1.00) per month.

13. For bakeries, for each twenty-five barrels of flour used, one dollar and seventy-five cents ($1.75).

14. For blacksmith and wagon shops, for the first forge one dol-

lar ($1.00) per month; for each additional forge fifty cents (.50) per month.

15. For laundries, from one dollar to two dollars per month.

16. For drug stores, one dollar and seventy-five cents ($1.75) per month.

17. For barber shops, for first chair seventy-five cents (.75) per month; forty-five cents (.45) per month for each additional chair.

18. For bath-tubs in hotels, public houses, boarding-houses and barber shops, etc., one dollar and fifty cents ($1.50) per month.

19. For water-closets in hotels and public buildings one dollar ($1.00) per month.

20. For public urinals, fifty cents (.50) per month.

21. For slacking lime, fifteen cents (.15) per barrel; for wetting brick ten cents (.10) per thousand; for mixing cement, ten cents (.10) per barrel.

22. Meter rates for any or all the uses above mentioned,
16 thirty cents (.30) per thousand gallons. Such person, company, or corporation so furnishing water shall not be obliged to accept less than one dollar ($1.00) per month as a minimum rate on any service through which water is delivered.

23. For mechanical or manufacturing purposes, rates as may be agreed upon. When no agreement can be obtained, meter rates at 8 cents (.08) per 1,000 gallons.

For irrigation.

1. For the purposes of this ordinance the dividing line between lot and block and acre property shall be the city block of two and one-half (2½) acres, inclusive of streets as platted and as subdivided into twenty lots of twenty-five (25) by one hundred and fifteen (115) feet, which lot shall be the unit of measurement for all areas of less than two and one-half (2½) acres.

2. For irrigating acre property, for each acre, three and 50/100 ($3.50) dollars, providing the maximum use of water shall not exceed 350,000 gallons per acre, and if in excess of above amount, proportionate rates shall be charged.

3. Meter rates for acre property, one cent (—) per thousand gallons.

4. For water furnished lot and block property which contains a single dwelling or building used for business purposes said water being used through a hose, for protection against fire, washing windows, sprinkling sidewalks and streets, watering lawns and gardens, $3.50 for the first lot, $2.00 for the second, $1.50 for the third, $1.25 for the fourth, $1.00 for the fifth, and 75 cents for each additional lot in the same block, per annum, or meter rates at thirty cents (.30) per thousand gallons. Provided, that for water furnished lot and
block property which does not contain a dwelling or building
17 used for business purposes, the rates shall be $1.50 for the first lot, $1.50 for the second lot, $1.25 for the third lot, $1.00 for the fourth lot, $1.00 for fifth lot, and for each additional lot in the same block, 75 cents per annum, or meter rates at fifteen cents (.15) per thousand gallons.

SECTION 2. Regulations as to meters and rate payments.—Said corporation so furnishing water *of* deomestic use and where excessive use for irrigation is suspected shall have power in all cases to apply meters at its own cost, and collect all meter rates.

It shall be the duty of any person, company, or corporation so furnishing water, on a written demand by a consumer, accompanied by a payment of five dollars ($5.00) to cover the cost of setting to apply a meter within a reasonable time thereafter, so as to correctly measure the amount of water delivered such consumer.

Whenever a meter is set at the request of any consumer, such person, company or corporation so furnishing water shall be entitled to collect in addition to water rates, the following rentals for the use, cleaning and repair of said meters: 1-inch meter and smaller, 25 cents per month; 2-inch meter, 35 cents per month; 3-inch meter 50 cents per month, and 4-inch meter, $1.00 per month.

All water rates except meter rates are due and payable monthly or quarterly in advance, and if not so paid shall be subject to an addition of 5 per cent.

Meter rates are due and payable monthly on presentation of bill, and upon meter rates an advance monthly deposit for each month, not exceeding three-fourths of the value of the estimated quantity of water to be consumed, may be required.

That this ordinance be recorded in the records of this
18 board, and that the same be published for 4 weeks in the San Diegan Sun, a daily newspaper published in said county.

This ordinance shall take effect on and after the 16th day of November, 1897.

JAMES A. JASPER,
Chairman Board of Supervisors.

The above ordinance was adopted by the following vote:
Supervisor James A. Jasper voting yes.
Supervisor William Justice voting yes.
Supervisor John Griggin voting yes.
Supervisor Charles H. Swallow voting yes.
Supervisor H. M. Cherry voting yes.

Attest my hand and seal of the board of supervisors, this 16th day of October, 1897.

[SEAL.]

WILL H. HOLCOMB,
Clerk of the Board of Supervisors of San Diego County, California.

(Endorsed:) "Passed, approved and adopted this Oct. 16, 1897. Will H. Holcomb, clerk. By J. M. Dodge, deputy."

And your orator further shows to your honors that the said petitioners are not, nor are any of them consumers or takers of water under or from your orator's system, or in any way interesed in the price or rates at or for which water is or will be furnished by

your orator. That there is pending in this court a suit brought by Charles D. Lanning, receiver of the San Diego Land and Town Company of Kansas, against H. M. Osborne, *et al.*, wherein the defendants are the same persons who appeared before the said board of supervisors and filed the protest above set forth. That in said action the said receiver alleged that the said Land and Town Company, and he, as such receiver, had fixed and established a rate under the water system, then owned by said company, and
19 being the same system now owned by your orator, as hereinafter alleged, of $7.00 per acre per annum, for irrigation, that the said defendants refused to pay said rate and were about to bring a multiplicity of suits to prevent the said receiver from collecting or enforcing the collection of said rates and praying that said rate be declared legal, and that the defendants be enjoined from prosecuting suits in the State courts as aforesaid. That said defendants appeared and answered to the bill of complaint therein, amongst other things, that some of said defendants had purchased water rights from said company, that some of them had purchased lands from the said company with the water right attached, that other of said defendants had procured a water right to their lands by the voluntary furnishing of water thereto by said company without compensation and that the company had contracted to and had furnished water to all of said lands at the rate of $3.50 per acre per annum, and alleging that by reason of their purchasing or otherwise procuring of said water rights they were not bound to pay such rates as would return said company any profit, but were only bound to pay such rates as would meet the expense of operation and management of said plant; and that, by reason of said company having fixed and established an annual rental of $3.50 per acre, for irrigation, it was estopped to fix, charge, or collect, a higher rate. That such proceedings were had in said cause that upon exceptions to said answer it was held and decided by this court that the matters set up in said answer were impertinent and insufficient, that any contracts made by the said company, as alleged in said answer, were wholly void, that the said company or its receiver had the lawful right to change and re-establish its rates, and that the only remedy of the consumers and defendants was to apply to the board of supervisors to fix and establish the rates.
20 That no final decree has yet been rendered in said action, but the defendants avow their intention to appeal from the decree of this court when entered, and still refuse to pay the rates established by the company as aforesaid, although the same have been in force since the first day of January, 1896. That in an action brought in this court of H. R. Mandell, *et al.*, *v.* The San Diego Land and Town Company, to foreclose the trust deed of said company to secure its bonds, such proceedings were had that on the 14th day of April, 1897, a decree of foreclosure was duly made and entered by this court ordering that the said receiver, Charles D. Lanning, sell all of the property of said Land and Town Company to satisfy the bonds of said company, and other of its debts, and the costs and expenses of the said receivership. That in pursuance of said decree

the said property was, on the 14th day of June, 1897, sold by said receiver to Benjamin P. Cheney and Walter L. Frost. That said Cheney and Frost duly assigned all of their rights, under their said purchase, to your orator, said sale by said receiver was by this court duly confirmed and said receiver, on the 30th day of June, 1897, conveyed said property to your orator, including the said water system and plant, and your orator has ever since been and is now the owner thereof, and has been and is now operating and managing the same, and is entitled to receive and collect reasonable rates and compensation for supplying water therefrom.

And your orator further shows to your honors that the said consumers, not being willing to petition therefor themselves, and contending that rates different from those first established by said Land and Town Company could not be fixed or established, either by your orator or by the said board of supervisors, nevertheless procured the petitioners, who, as aforesaid, were not consumers
21 and could not be injuriously affected by an adverse decision, to file and prosecute said petition in order that the said consumers might insist upon and procure the fixing of rates upon the basis claimed by them of returning to your orator its expenses of operation and management, only, without any net revenue or profit to it. That said consumers did appear in said proceeding, and, by their protest, and otherwise, maintain and insist that they were entitled to have the rates so fixed, and in support of thier contention, and over the objections of your orator they were allowed to and did make proof of their respective purchases of water rights and purchases of lands from the said land and town company and of representations made by said land and town company to the effect that water would be furnished to the lands sold by it to some of said consumers for $3.50 per annum per acre for irrigation, and your orator alleges that the said board of supervisors, instead of so fixing said rates as to return to your orator a net profit of not less than six per cent. upon the value of its plant, acted upon said protest and the proof made thereunder and in pursuance of said protest and in violation of the express provisions of the statute above set forth, arbitrarily, unjustly and without right so fixed said rates by said ordinance as to provide for the expenses of operating and managing its said plant by your orator and so as to return to your orator no net profit whatever, or to make good, or in any way provide for the natural depreciation of said plant.

And your orator further shows to your honors that the rates fixed by said board of supervisors are unreasonable and unjust and will return your orator no revenue whatever; that if your orator is compelled to furnish water at the rates so fixed, it can do so only at a continued actual loss to it, and the enforcement of said rates will amount to the taking of your orator's property without just
22 or any compensation and a confiscation thereof.

And your orator further shows to your honors that the rate of $7.00 per acre per annum for irrigation, fixed by said land and town company and said receiver and maintained by your orator, is a reasonable rate to the consumers and would, if allowed, return

to your orator much less than six per cent. net, allowed your orator by said statute, and that said rate was legally and properly established and is now in force.

Wherefore, your orator prays your honors that the rates fixed by said board of supervisors be declared unreasonable, unjust, and void; that said ordinance be declared void and illegal and set aside and annulled; that the said rate of $7.00 per annum per acre, fixed and established by said land and town company and said receiver and maintained by your orator, be declared to be reasonable, just and valid, and still in force, and that your orator be decreed to have the right to collect said rate. And that your orator shall have, generally, such other and further relief as the nature of its case may require.

Therefore will your honors grant unto your orator the writ of subpœna, issuing out of and under the seal of this court, to be directed to said defendants James A. Jasper, Charles H. Swallow, William Justice, John Griffin and Howard M. Cherry, (members of and constituting the board of supervisors of the county of San Diego, State of California), and M. T. Hall, A. J. Jenkins, P. H. Evans, E. P. Vaughan, J. A. Fritz, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J.
23 Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, C. Y. Gray, E. E. Shaffer, D. C. Collier, commanding them, and each of them, by a certain day, and under a certain penalty therein inserted, to appear before your honors, in the circuit court, aforesaid, and then and there answer the premises and abide the order and decree of the court.

WORKS, WORKS & INGLE,
WORKS & LEE,
Solicitors for Complainant.

(Endorsed:) Original No. 768 In equity U. S. circuit court, ninth circuit, southern district of California. The San Diego Land & Town Co. a corporation, complainant *vs.* James A. Jasper, *et al.* defendants—Bill in equity—Filed Oct 27 1897 Wm. M. Van Dyke clerk—By E. H. Owen deputy—Works, Works & Ingle Works & Lee, rooms 420 to 425, Henne building, Los Angeles, Cal. solicitors for complainant.

24 UNITED STATES OF AMERICA:

Circuit Court of the United States, Ninth Circuit, Southern District of California. In Equity.

The President of the United States of America to James A. Jasper, Charles H. Swallow, William Justice, John Griffin, and Howard M. Cherry (members of and constituting the board of supervisors of the county of San Diego, State of California), M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Greeting:

You are hereby commanded, that you be and appear in said circuit court of the United States aforesaid, at the court-room in Los Angeles, on the sixth day of December, A. D. 1897, to answer a bill of complaint exhibited against you in said court by the San Diego Land & Town Company, a corporation, who is a citizen of the State of Maine and to do and receive what the said court shall have considered in that behalf. And this you are not to omit, under the penalty of five thousand dollars.

Witness, the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 30th day of October in the year of our Lord one thousand eight hundred and ninety-seven and of our Independence the one hundred and twenty-second.

25 WM. M. VAN DYKE, *Clerk*,
[SEAL.] By E. H. OWEN, *Deputy Clerk*.

Memorandum Pursuant to Rule 12, *Supreme Court U. S.*

You are hereby required, to enter your appearance in the above suit, on or before the first Monday of December next, at the clerk's office of said court pursuant to said bill: otherwise the said bill will be taken *pro confesso*.

WM. M. VAN DYKE, *Clerk*,
By E. H. OWEN, *Deputy Clerk*.

UNITED STATES MARSHAL'S OFFICE,
SOUTHERN DISTRICT OF CALIFORNIA.

I hereby certify, that I received the within writ on the 1st day of November 1897, and personally served the same on the 2nd day of November 1897 on each and every of the within-named defendants (excepting C. N. Bowers, Wm. Weidekamp and Wm. Rock) by delivering to and leaving with each and every of said defendants, (excepting C. N. Bowers Wm. Weidekamp and Wm. Rock) named therein, personally, at the county of San Diego in said district, a

certified copy thereof certified to by Wm. M. Van Dyke Esq. clerk &c. and further certify, that after due diligence and enquiry, have been unable to find C. N. Bowers, Wm. Weidekamp and Wm. Rock, defendants named therein, therefore return them not served.

N. A. COVARRUBIAS,
U. S. Marshal,

26 By W. J. OAKS, *Deputy.*

Los Angeles, Dec. 6th, 1897.

(Endorsed:) Original No. 768 U. S. circuit court ninth circuit, southern district of California. In equity. San Diego Land & Town Co. *vs.* James A. Jasper *et al.* Subpœna. Filed Dec. 6, 1897. Wm. M. Van Dyke clerk.

27 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM Justice, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie *H*owman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants. } Demurrer.

28 The demurrer of James A. Jasper, Charles H. Swallow, William Justice, John Griffin, and Howard M. Cherry as members of and constituting the board of supervisors of the county of San Diego, State of California, defendants.

I.

These defendants, not confessing all or any of the matters in the bill of complaint set forth, do demur to said bill for that the same does not state such a case, nor contain any matter in equity entitling the complainant to any relief against these defendants. Wherefore they pray the judgment of the court, whether they shall be compelled to further answer said bill and further pray to be dismissed with their costs.

II.

These defendants, not confessing all or any of the matters and things in the bill of complaint contained to be true as therein alleged, do demur to said bill, and for cause thereof show that said bill is multifarious in the respects, to wit:

1. That it appears by said bill that the same is exhibited against these defendants and the several other persons therein named as defendants thereto for two distinct matters and causes, having no connection with each other, in one of which these defendants are not in any manner interested or concerned, for which reason and for divers other errors appearing in said bill, these defendants demur thereto, and pray the judgment of the court whether they shall be compelled to make any further or other answer to the said bill and pray to be dismissed with their costs:

III.

These defendants, not confessing all or any of the matters and things in the bill of complaint contained to be true as therein alleged, do demur to so much of said bill as prays that "the said rate
29 & 30 of $7 per annum per acre fixed and established by said land & town company and said receiver and maintained by your orator, be declared to be *un*reasonable, just and valid, and still in force, and that your orator be declared to have the right to collect said rate."

These defendants do demur and for cause of demurrer show, that the said complainant has not made or stated such a case as entitles it in a court of equity to the relief so prayed or any part thereof; and these defendants humbly pray the judgment of the court as to such parts of the bill as they have here demurred to as aforesaid.

Wherefore defendants pray the judgment of the court whether they shall be compelled to further answer make to said parts of the bill herein referred to.

JAMES A. JASPER,
CHARLES H. SWALLOW,
WILLIAM JUSTICE,
JOHN GRIFFIN,
HOWARD M. CHERRY,
By A. H. SWEET,
Solicitor for Defendants.

I, A. H. Sweet of counsel for the defendants in the above cause, do hereby certify that the foregoing demurrer to the bill of complaint is in my opinion well founded in law.

A. H. SWEET.

UNITED STATES OF AMERICA,
District of Southern California, State of California, } ss:
San Diego County,

I, Howard M. Cherry, one of the defendants in the above cause, being duly sworn, do say that the foregoing demurrer to the bill of complaint is not interposed for purposes of delay.

31 HOWARD M. CHERRY.

Subscribed and sworn to before me this 31st day of December 1897.

[SEAL.] WILL H. HOLCOMB,
County Clerk,
By T. J. STOREY, *Deputy*.

(Endorsed:) No. 768 In the United States circuit court of the ninth circuit for the southern district of California. The San Diego Land and Town Company, a corporation, complainant, *vs.* James A. Jasper, *et al.* defendants. Demurrer to bill of complaint. Received copy of the within demurrer this 3rd day of January 1898. Works Works & Ingle Works & Works, solicitor- for complainant Filed Jan. 3 1898 Wm. M. Van Dyke clerk A. H. Sweet solicitor for defendants Office—court-house San Diego—Cal.

32 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekam-, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants.

33 The demurrer of M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, defendants.

I.

These defendants, not confessing all or any of the matters in the bill of complaint set forth, do demur to said bill for that the same does not state such a case, nor contain any matter in equity entitling the complainant to any relief against these defendants. Wherefore hey pray the judgment of the court whether they shall be compelled

to further answer said bill and further pray to be dismissed with their costs.

II.

These defendants, not confessing any of the matters and things contained in the said bill to be true as therein alleged, do demur to said bill and for causes thereof show: That said bill is multifarious, to wit:

1. For that it appears by the said bill that the same is exhibited against these defendants and the other defendants, to wit, the Board of Supervisors of the County of San Diego, State of California, for several distinct matters and causes, in many whereof, as appears by the said bill, these defendants are not in any manner interested or concerned; by reason of which distinct matters the said complainant's said bill is drawn out at a considerable length, and by joining these defendants' distinct matters together, which do not depend on each other, in the said bill, the pleadings, orders and proceedings
34 will, in the progress of the said suit, be intricate and prolix and these defendants put to unreasonable and unnecessary charges, although several parts thereof no ways relate to or concern them or either of them.

2. For that it appears by said bill that the same is exhibited against the defendants therein named for distinct causes of action and that there is an improper joinder of the subject-matter of said actions.

For which reasons and for divers other errors appearing in the said bill, these defendants each do demur thereto and pray judgment of the court whether they or either of them shall be compelled to make any further or other answer to said bill; and they pray to be dismissed from hence with their costs on this behalf sustained.

III.

These defendants not confessing all or any of the matters in the said bill of complaint set forth, do demur to said bill for that the same does not state such a case, nor contain any matter in equity entitling the complainant to join these defendants with the Board of Supervisors of the County of San Diego, State of California, for which reason these defendants demur thereto and pray the judgment of the court whether they shall be compelled to make any further answer to said bill and pray to be dismissed with their costs.

A. H. SWEET,
Solicitor for Defendants.

I, A. H. Sweet of counsel for the defendants in the above cause, do hereby certify that the foregoing demurrer to the bill of complaint is in my opinion well founded in law.

A. H. SWEET,
Of Counsel for Defendants.

35 UNITED STATES OF AMERICA,
District of Southern California, State of California, } ss:
County of San Diego,

I, Thos. J. Hayes, one of the defendants in the above-entitled cause, being duly sworn, do say that the foregoing demurrer to the bill of complaint is not interposed for the purposes of delay.

THOMAS J. HAYES.

Subscribed and sworn to before me this 31st day of December 1897

[SEAL.]

WILL H. HOLCOMB,
County Clerk,
By T. J. STOREY, *Deputy.*

(Endorsed:) No. 768. In the United States circuit court of the ninth circuit for the southern district of California. The San Diego Land and Town Company, a corporation, complainant, *vs.* James A. Jasper, *et al.* defendants. Demurrer to bill of complaint. Received copy of the within demurrer this 3rd day of January, 1898. Works Works & Ingle Works & Lee solicitor- for complainant. Filed Jan. 3 1898 Wm. M. Van Dyke clerk. A. H. Sweet, solicitor for defendant Office—court-house San Diego, Cal.

36 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, (a Corporation), Complainant,

vs.

JAMES A. JASPER, CHARLES A. SWALLOW, WILLIAM JUSTICE, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Schaffer, D. C. Collier, Defendants.

37 Exceptions taken by the above-named defendants, James A. Jasper, Charles H. Swallow, William Justice, John Griffin, and Howard M. Cherry (members of and constituting the board of supervisors of the county of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, to the bill of complaint of The San Diego Land & Town Company, complainant, filed ag-inst them in this cause.

First exceptions. For that so much of said bill commencing in the 27th line of the second page thereof, with the words following, to wit, "That your orator and its predecessor in ownership etc.," and ending in the 6th line of page three thereof, with the words, "of such water to said consumers," is impertinent and ought to be expunged.

Second exception. For that so much of said bill contained in lines 7 and 8, on page 3 thereof, in the words following, to wit, "by the expenditure of said large sum, your orator and its predecessor in ownership of said property have procured and," is impertinent and ought to be expunged.

Third exception. For that so much of said bill commencing in line 18 of page 3 thereof, with the words "That the annual," and ending with the words, "$25,000 per annum," in line 27 of page 3, is impertinent and ought to be expunged.

Fourth exception. For that so much of said bill as consists
38 of lines 28, 29, 30, 31 and 32, on page 3 thereof, commencing with the words "That the cost of putting in said distributing system within the city of National City," and ending with the words, "outside of said city," is impertinent and ought to be expunged.

Fifth exception. For that so much of said bill as consists of lines one to six, both inclusive, on page 4 thereof, commencing with the words, "That in order to pay your orator etc.," and ending with the words. "not less than $120,000," is impertinent and ought to be expunged.

Sixth exception. For that so much of said bill commencing in the 7th line on the 4th page thereof, with the words following to wit, "That all of the mains and pipes of the complainant etc.," and ending in the 18th line of the 4th page thereof, with the words, "than $44,000," is impertinent and ought to be expunged.

Seventh exception. For that so much of said bill commencing in the 19th line, on page 4 thereof, with the words, "That the amount than can be realized," and ending in line 22 of said page 4, with the words, "exceed the sum of $13200," is impertinent and ought to be expunged.

Eight- exception. For that so much of said bill contained in lines 23, 24 and 25, on page 4 thereof, in the words following, to wit, "That the value of the water, water rights, reservoirs, franchises and property necessary for the proper operation of its business and now owned by the complainant is $1,026,022.79," is impertinent and ought to be expunged.

Ninth exception. For that so much of said bill commencing in the 26th line of page 4 thereof, with the words, following, to wit, "That no other person or corporation is," and ending with the words, "persons or corporation," in line 31 page 4 thereof, is impertinent and ought to be expunged.

39 Tenth exception. For that so much of said bill commencing in the 8th line of page 8 thereof, with the words, following, to wit, "and thereupon the consumers," and ending with the words "attorneys for said consumers," in line 12 of page 9 thereof, is impertinent and ought to be expunged.

Eleventh exception. For that so much of said bill commencing with the 14th line of page 9 thereof, with the words, following, to wit, "That your orator," and ending with the words, "water works and system," in line 22, page 9 thereof, is impertinent and ought to be expunged.

Twelfth exception. For that so much of said bill commencing in the 23rd line of page 9 thereof, with the words, "That it was shown," and ending with the words, "as above alleged," in line 3rd of page 10 thereof, is impertinent and ought to be expunged.

Thirteenth exception. For that so much of said bill as consists of lines 4 and 5, on page 10 thereof, in the words following, to wit, "That no proof was made, or evidence given to the contrary by the petitioners or any one else," is impertinent and ought to be expunged.

Fourteenth exception. For that so much of said bill commencing

in the 6th line on the 10th page thereof, with the words, "And your orator," and ending with the words, " attorneys for the San Diego Land & Town Company," in line 5 of page 11 thereof is impertinent and ought to be expunged.

Fifteenth exception. For that so much of said bill contained in lines 6, 7 and 8 of page 11 thereof, in the words following, to wit, " but that said board wholly failed and refused to make the findings or determine the matters set forth in said request, or any or either of them," is impertinent and ought to be expunged.

40 Sixteenth exception. For that so much of said bill commencing in the 1st line of page 16 thereof, with the words, "And your orator," and ending with the words," by your orator," in line 5 of page 16 thereof, is impertinent and ought to be expunged.

Seventeenth exception. For that so much of said bill commencing in the 5th line of page 16 thereof, with the words, " That there is pending," and ending with the words, " first day of January, 1896," in line 14 of page 17 thereof, is impertinent and ought to be expunged.

Eighteenth exception. For that so much of said bill commencing in line 1, of page 18 thereof, with the words, "And your orator," and ending with the words " for irrigation," in line 20, of page 18, is scandalous and impertinent and ought to be expunged.

Nineteenth exception. For that so much of said bill contained in lines 23 and 24 of page 18 thereof, in the words, following, to wit, " acted upon said protest and the proof made thereunder and in pursuance of said protest," is impertinent and ought to be expunged.

Twentieth exception. For that so much of said bill commencing in line 6 of page 19 thereof, with the words, "And your orator," and ending with the words, " now in force," in line 12 of page 19, is impertinent and ought to be expunged.

Twenty-first exception. For that so much of said bill contained in lines 14 and 15 of page 19 thereof, in the words, following, to wit, " unreasonable, unjust and," is impertinent and ought to be expunged.

Twenty-second exception. For that so much of said bill commencing in line 16 of page 19 ther-of, with the words, " that the said rate," and ending with the words, " collect said rate," in line

41 20 of page 19, is impertinent and ought to be expunged.

For which reason the defendants except to said bill and pray that such scandalous and impertinent matter be expunged therefrom.

A. H. SWEET,
Solicitor for Defendants.

(Endorsed:) No. 768 In the United States circuit court of the ninth circuit for the southern district of California. The San Diego Land and Town company, a corporation, complainant *vs.* James A. Jasper, *et al.* defendants. Exceptions to bill of complaint Received copy of the within exceptions this 3rd day of January 1898 Works Works & Ingle—Works & Works solicitor for complainant. Filed Jan 3 1898 Wm. M. Van Dyke clerk. A. H. Sweet, solicitor for defendant. Office court-house San Diego, Calif.

42 In the United States Circuit Court, Ninth Circuit, Southern District of California.

SAN DIEGO LAND AND TOWN COMPANY, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

The defendants having filed their exceptions to certain portions of the bill of complaint herein, the complainant now confesses exception No. 20, to so much of said bill commencing on line 6 of page 19 thereof, with the words "And your orator" and ending with the words "now in force," in line 12 of page 19, and being in the words and figures following:

"And your orator further shows to your honors that the rate of $7.00 per acre per annum for irrigation fixed by said land and town company and said receiver, and maintained by your orator, is a reasonable rate to the consumers and would, if allowed, return to your orator much less than the six per cent. net allowed your orator by said statute, and that said rate was legally and properly established and is now in force."

Also confesses exception 22, to so much of said bill commencing on line 16, page 19, thereof, with the words "that the said rate" and ending with the words "collect said rate," in line 20 of page 19, the same being a part of the prayer for relief and being in the words following:

"That the said rate of $7.00 per annum per acre fixed and established by said land and town company and said receiver, and maintained by your orator, be declared to be reasonable, just and
43 valid and still in force, and that your orator be decreed to have a right to collect said rate."

WORKS, WORKS & INGLE,
WORKS & LEE,
Solicitors for Complainant.

(Endorsed:) No. 768 U. S. circuit court, ninth circuit, southern district of California. San Diego Land and Town Co. complainant *vs.* James A. Jasper *et al.* defendants. Confession of exception Filed Mar. 9 1898 Wm. M. Van Dyke clerk. Works Works & Ingle Works & Lee, rooms 420 to 425, Henne building, Los Angeles, Cal. solicitors for complainant.

44 At a stated term, to wit, the August term, A. D. 1898, of the circuit court of the United States of America, of the ninth judicial circuit, in and for the southern district of California, held at the court-room in the city of Los Angeles on Monday the twenty-second day of August, in the year of our Lord one thousand eight hundred and ninety-eight:

Present: The Honorable Erskine M. Ross, circuit judge.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.
} No. 768.

In this cause exceptions and demurrers to the bill having been heretofore argued and submitted, and the court having fully considered the same, now renders its written opinion and orders that the said exceptions and demurrers be overruled. And on motion of A. H. Sweet, Esq., of counsel for defendants, it is ordered that defendants be given until the rule day in October to answer.

I, Wm. M. Van Dyke, clerk of the circuit court of the United States, for the southern district of California, do hereby certify the foregoing to be a full, true and correct copy of an original order made and entered by said court August 23rd, 1898, in the cause entitled The San Diego Land & Town Company, a corporation, complainant, *vs.* James A. Jasper, *et al.*, defendants, No. 768, and remaining of record therein.

Attest my hand and the seal of said circuit court this 25th day of September, A. D. 1901.

[SEAL.] WM. M. VAN DYKE, *Clerk.*

45 (Endorsed:) No. 768 U. S. circuit court ninth circuit, southern district of California. The San Diego Land & Town Company, a corporation, *vs.* James A. Jasper, *et al.* Certified copy. Order overruling exceptions and demurrers. Filed Sep. 25 1901. Wm. M. Van Dyke clerk.

46 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER, CHARLES H. SWALLOW, JOHN Griffin, Howard M. Cherry, and William Justice, Members of and Constituting the Board of Supervisors of San Diego County, State of California, Defendants.
} No. 768. Answer of the Defendants.

The joint and several answer of James A. Jasper, Charles H. Swallow, John Griffin, Howard M. Cherry, and William Justice, impleaded as members of the board of supervisors of San Diego county State of California, defendants, to the bill of complaint of The San Diego Land and Town Company, complainant.

These defendants, saving and reserving unto themselves the benefit of all exceptions to the errors and imperfections in said bill contained, for answer to so much thereof, as they are advised it is necessary or material for them to answer *thereto* do aver and say that:

They admit that said complainant is, and at all times since June 30th, 1897, was, a corporation organized and existing under and by virtue of the laws of the State of Maine and that since said date it has been doing business in the State of California.

They deny that said complainant is now, or at any time was, the owner of water and water rights, as alleged in said bill of
47 complaint, otherwise than as the successor to the original appropriator, under the constitution and laws of the State of California, and the acts of Congress, of the water in a natural stream in said San Diego county, State of California, known as the "Sweetwater river," for sale, rental or distribution to the public.

Said defendants admit said complainant is, and has been, since the thirtieth day of June, 1897, the owner of a reservoir and system for furnishing the water, appropriated as aforesaid, to consumers for domestic and irrigation and other purposes for which water is needed for consumption and a franchise for the impounding, sale, rental and distribution of the waters stored by it, to consumers under said system, inside and outside of the city of National City in said county and State.

And these defendants say that said franchise is, and has been, during the times mentioned in said complaint exercised by complainant and its predecessors in ownership, non-resident foreign corporations by virtue of the comity of the State of California, and subject to the conditions prescribed by the laws of said State, as provided in section 15, article 12, of the constitution thereof.

They admit that complainant's main reservoir and supply of water is, and was at all times mentioned in said complaint, situated on the Sweetwater river, a small stream in said county about five miles distant from said city of National City, and that complainant's said system, reservoirs, mains, flumes, aqueducts and pipes cover and can supply but a limited territory, consisting of certain farming lands within and outside of National City and in part of the residence portion of said city of National City; and defendants further say that the amount of water annually yielded by said stream, under
48 the appropriation, is more than sufficient to fill said reservoirs and that the same is complainant's only reservoir.

These defendants admit that the San Diego Land and Town Company of Kansas, as plaintiff's predecessor in ownership of the property mentioned in the bill of complaint, in procuring the water and water rights, reservoir and distributing system now *owned* by complainant as aforesaid, and in preparing itself to supply consumers with water expended up to June 30, 1897, a considerable sum of money, but how much of the sum of $1,026,022.79, alleged in the bill of complaint has been so expended, these defendants have neither knowledge, remembrance, information or belief.

They admit that said Kansas corporation expended for the enlargement and extension of said system, some money in constructing what is known as "pipe line No. 2," but that as to how much of the sum of $65000 alleged in the bill of complaint to have been expended for such purposes was so expended, the defendants have neither knowledge, remembrance, information or belief.

The defendants deny that complainant expended any moneys up to June 30, 1897, or at any other time, in procuring any water or water rights, reservoir or distributing system owned by complainant as aforesaid, or that in preparing itself to continue to supply consumers with water from said system, it expended any money whatsoever, except the purchase price by it paid for the whole of said property on or about June 30, 1897, as hereinafter set forth.

And these defendants deny, upon their information and belief, that the sum of $1,026,022.79, or any sum in excess of one-fourth thereof, was reasonably necessary or proper to be expended for the purpose of furnishing and supplying said water to the con-
49 sumers now taking water from said system; and they deny that the expenditure of any part of the alleged sum of $65000 would have been reasonably necessary for the enlargement or extension of said system, if the same had been properly planned and constructed in the first instance.

And these defendants deny that the whole of said system or any proportion in excess of two-thirds of its capacity is now actually used or useful, or at any of the times mentioned in said compla-nt, was actually used and useful, or used or useful to the appropriation and furnishing or appropriation or furinishing of said water to said consumers.

And these defendants, on information and belief, allege that at the time of the passage of the ordinance referred to in the bill of complaint, and at all times since, the said reservoir, plant and distributing system, together with all the property used or useful for supplying water thereunder, were and are of the value of not to exceed $250,000.

But these defendants upon information and belief, allege that prior to June 30, 1897, the complainant had no property and transacted no business in the State of California, save as hereinafter set forth.

That about June, 14, 1897, Benjamin P. Cheney and Walter L. Frost, acting in behalf of said corporation complainant, purchased all of said water system and property, used and useful for supplying water thereunder, upon a foreclosure sale, under a decree of this United States circuit court for the southern district of California, in the certain cause therein pending, No. 660 in which H. R. Mandell *et al.* were plaintiffs and The San Diego Land and Town Company of Kansas was defendant; that at the same time, and at the same sale and as part of the same purchase, said Cheney and Frost,
50 acting for complainant, purchased under the decree in said cause all the other property of the San Diego Land and Town Company of Kansas, embracing its lands, personal property, and all of the stock and bonds issued by the National City and Otay Railway Company, which were then owned by said Kansas corporation as an entirety and for a price *in solido*.

That as defendants are informed and believe the said Cheney and Frost paid the whole purchase price of said property in behalf of and with the means of complainant.

That the proportionate part of the price so paid for the whole of said water system and property used and useful to furnish water to

consumers of the whole price paid for said water system and all said other property, was not to exceed $250,000. And that after such purchase, and on or about said June 30, 1897, said Cheney and Frost transferred and assigned the rights acquired by them in said property to the complainant and that complainant thereupon received conveyance of the same from the receiver appointed by this court, and of all said property of said Kansas corporation.

And that thereupon complainant began to supply water from said system to consumers. And defendants allege that the price so paid by and on behalf of complainant for said water system was and at all times since has been, and still remains its full value.

And defendants allege that complainant has at no time invested in its business of supplying water to consumers, through said water system, more than the said purchase price of $250,000 for all the property mentioned in the complaint.

These defendants admit that by the expenditure of its moneys the San Diego Land and Town Company of Kansas, as the predecessor in ownership of said water system and property used for furnish-
51 ing and supplying water as aforesaid, procured and became the owner of the reservoir site and the reservoir of the capacity of six billions of gallons of water mentioned in the complaint; and that said Kansas corporation constructed and laid therefrom, its water mains necessary to supply said consumers including the city of National City and the country between its said source of supply and said city, with water, and that said last-named corporation constructed and put in mains, pipes and all other necessary things and connected said water supply with the premises and buildings of said city, and its inhabitants, and with the houses and premises of consumers inside and outside of said city, using water for the purpose of irrigation.

But they state that the use of such water is not solely for the purpose of irrigation, but also for domestic and miscellaneous uses.

And defendants say that they have no knowledge, remembrance, information or belief as to what sum or sums said Kansas corporation expended for said purpose. And they aver that complainant expended no moneys for said purposes save as here-before alleged in the purchase of said system after it had been completed.

These defendants deny that the annual reasonable expense of complainant, including the cost of repairs, management and operation of its said works have per annum, not including replacement, by reason of depreciation, amounted to not less than $20,000, or will, including all replacements necessary as current repairs, amount to said sum for the coming year or to any sum exceeding $9000, or that said annual reasonable expenses have amounted to more than $9000.

And these defendants further answering allege: That said
52 annual reasonable expenses of complainant including the cost of repairs, together with all replacements necessary as current repairs, and of the management and operation of its said works do not amount to more than the sum of $9000.

These defendants deny that the total receipts that can be derived

by complainant from its said plant and system at the rate fixed by the ordinance set out in said complaint, and including the money received from the city of National City, and its inhabitants, under the rates fixed by the board of trustees of said city, will not exceed the sum of $25,000. And these defendants further answering aver; that the said total receipts that can be derived by complainant from its said plant and system at the rates prescribed by said ordinance, including those received from the rates fixed by the board of trustees of National City, will exceed the sum of $30,000 per annum, and will yield to complainant more than six per cent. net revenue upon the actual value of its said plant and system.

And defendants aver, as they are informed and believe, that not to exceed two-thirds of the capacity of said water storing and distributing system is actually used or useful to the appropriation and furnishing of water to consumers now living under said system. And that if the whole capacity of said system was actually used and useful to supply a sufficient number of consumers to fully employ the whole of such capacity, that, at the rates fixed by the ordinance referred to in the complaint, the total annual receipts which would be derived by complainant from its said plant and system, would, at least equal $45,000, the proportion of irrigation to domestic use, and other uses remaining the same.

That the income from domestic and similar uses, is relative to the amount of water used, much greater than the income from
53 irrigation. And that as population increases the proportion of domestic use to like uses of water may reasonably be expected to largely increase the uses for irrigation.

And that with such increase of population the use of the whole water-supplying capacity of said system and plant would yield annual receipts largely in excess of $45,000.

These defendants further answering say that they do not know, and have neither information, remembrance or belief as to the cost of putting in said distributing system within the city of National City and they do not know whether there was expended or incurred in putting said distributing system within the city, the sum of $183,753.90, or how much of said sum more or less was so expended; and they have neither knowledge, remembrance, information or belief as to whether said sum or how much thereof was so expended; and they do not know and have no remembrance, information or belief, as to what was or is the cost of the balance of said system constructed outside of said city. And defendants allege that one of the purposes of constructing complainant's said water system was to furnish water to said National City and its inhabitants, and that said system was constructed of a sufficient capacity to impound, supply and furnish water to said city of National City and its inhabitants, for irrigation, domestic and other uses, as well as to supply water for domestic and irrigation purposes outside of National City; and upon information and belief these defendants aver that ever since the construction of said system said complainant and its predecessors in ownership have, by and through the same, impounded, furnished and supplied water to said city and its inhabitants

for domestic and irrigation and other uses, and that complainant does now through said system furnish and supply
54 said city and its inhabitants for such purposes; and that by reason of supplying water to said city and its inhabitants, it was necessary to construct the same upon a larger scale than would have been required, and that the pipes and mains leading from complainant's said reservoir to said city are much larger than is necessary to furnish water to the consumers outside of National City; and that a considerable part of the capacity of such reservoir and of the pipes and mains outside of said city of National City is now and all times since the completion of said system has been used for the purpose of carrying and supplying water to said city and its inhabitants, and that the pipes and mains within said city are and have been almost exclusively so used. And that as they are informed and believe the "pipe line No. 2" mentioned in the complaint was built particularly to supply water to said city of National City and its inhabitants, and is, and has been used almost exclusively to supply water to said city and its inhabitants and to lands outside of said city owned by complainant.

These defendants deny that in order to pay complainant the amount of its annual expenses and an income of six per cent. on the whole amount actually invested by it in said water rights and water system up to the date of the passage of the ordinance in said complaint mentioned, it is necessary that such rates for water supplied and consumed, be so fixed as to r-alize to complainant a sum not less than $120,000 or any sum exceeding $28,000.

And defendants upon information and belief allege that the amount invested by the San Diego Land and Town Company of Kansas in said system was excessive, and that the cost thereof was largely in excess of what it should have been by reason of bad management on the part of the company constructing the
55 same and its officers and agents. And that on account of such bad management a large quantity of defective pipes was used in constructing said system, which had to be and was taken up and replaced with material of a better quality by complainant's said predecessor in ownership of said system.

That the original expenditure for said defective pipe and all the cost and expense of attempts to make the same work was a total loss.

And these defendants allege upon information and belief that the cost and expenditures made by said predecessor, for, and on account of the defective pipe and materials, which proved worthless and unreliable was not less than $65000.

And, upon like information and belief, that the cost to said predecessor of its reservoir lands was, by reason of litigation caused by the trespass, and tortious acts of said Kansas corporation in its attempts to acquire the same unnecessarily and unreasonably enhanced by the sum of $75000.

These defendants admit that all of the mains and pipes *po* of the complainant and other parts of its property so used in furnishing

water to consumers are to some degree perishable property; and that they require to be kept in repair. A And upon information and belief they deny that they require to be replaced once in sixteen years or at any other time save as gradu-lally replaced in making the current repairs each year.

And defendants admit, that, as they are informed and believe the complainant has replaced since the filing of the bill the portions of a main referred to in said bill as necessary to be replaced, and has expended some money in so doing, but how much neither of
56 them has either *knolwedge*, information, remembrance or belief. But they aver that said main is entirely situated within said city of National City.

They further admit upon information and belief, that outside of said city since the filing of said bill complainant has replaced about forty rods of other main pipe; but at what cost or expense, they have neither knowledge, remembrance information or belief. But they aver that the replacement of all mains, was necessary solely because the main- originally laid about the fall of 1887 were of poor material and construction.

That in the exercise of reasonable care and management the same ought never to have been laid; that the portions of said pipe replaced outside of National City as aforesaid was of the identical kind and quality, with the large amount attempted to be used by said Kansas corporation as hereinbefore stated and found useless and upon repeated trial altogether rejected.

And upon information and belief the defendants allege that notwithstanding the defective quality of much of the pipe and mains originally laid by said Kansas corporation and which formed the distributing system of said water plant when acquired by complainant as hereinbefore alleged, the average cost and expense of repair of said reservoir and upon the mains, pipes and whole distributing system, including new material used, all labor of men and teams employed, and the cost of a keeper for said reservoir and of men and teams employed in the actual operation of said system has not in the aggregate, for each year during the decade ending January 1, 1898, exceeded the sum of $8400; and that for the two years ending January 1, 1898, it had not exceeded the average of $4360. And that the aggregate of such cost and expense of repairs and opera-
57 tions during the year 1896, was not over $5000; nor during the year 1897 over $3700.

That in the above average cost and expenses for ten years is included an extraordinary expenditure caused by flood damages in the year 1895, which caused such cost and expense for said year 1895, to run up to above $29000.

That such damages by flood was as defendants are informed and believe, a consequence of defective engineering and construction.

And these defendants upon information and belief aver that the repairing of the said mains and pipes of complainant are much more frequently necessary and the cost thereof much more than is reasonable, for a system of the kind and extent of complainant's said system, because a portion of the said pipe used and laid therein was of

an inferior quality and was not adapted to the duty required of the same.

These defendants further say that they do not know and have not been informed, save by complainant's representation, and cannot set forth their belief, as to what amount can be realized from the city of National City and its inhabitants, per annum, from the rates fixed by the board of trustees of said city, and now in force, or as to what amount has heretofore or will in the near future, be realized from said city and its inhabitants per annum from the rates *dso* fixed by its said board of trustees.

These defendants deny that the value of the water, water rights, reservoirs, franchises and other property necessary for the proper operation of complainant's said business of furnishing and supplying water and now owned by said complainant is, or at any time during the complainant's ownership thereof has been the sum of $1,026,022.79, or any other sum exceeding $250,000.

58 These defendants admit that no other person or corporation, is, or ever has been, furnishing a supply of water to the consumers supplied by complainant, nor is there now, nor has there been any other system of water works by which said consumers can be furnished with water, but the franchise and right of the complainant to furnish water to said consumers is not exclusive of other persons of corporations and that by the constitution and statutes of the State of California, the use of all waters now appropriated, or that may be hereafter appropriated for irrigation, sale, rental and distribution is declared to be a public use, and the right to collect rates for compensation for use of such water is declared to be a franchise, and that except when so furnished to any city and county, or town, or the inhabitants thereof, shall be regulated and controlled in the counties of said State by the several boards of supervisors thereof, in the manner prescribed by law, and that it is further provided that whenever a petition of not less than twenty-five inhabitants, who are tax-payers of any county of said State, shall in writing, petition the board of supervisors therefor, said board shall fix and establish the rates to be charged by any corporation furnishing water as aforesaid.

These defendants also admit that sections four (4) and five (5) of the act of the legislature of the State of California approved March 12th, 1885, to regulate and control the sale, rental and distribution of appropriated waters of this State other than in any city, city and county, or town therein, and to secure the right of way for the conveyance of such water to the places of use, are, as set forth in said complaint. And defendants aver that said section five (5) also provides that, "the said rates when so fixed by such board shall be

59 binding and conclusive for not less than one year next after their establishment, and until established anew or abrogated by such board of supervisors, as hereinafter provided. And until s..ch rates shall be so established, or after they shall have been abrogated by such board of supervisors as in this act provided the actual rates established and collected by each of the persons, companies, associations and corporations furnishing or that shall here-

after furnish appropriated *wtaers* for sale, rental or distribution to the inhabitants of any of the counties of this State, shall be deemed and *accpeted* as the legally established rates thereof." And defendants further aver that it also provides in section 7 of said act now in force as follows:

"SEC. 7. Each board of supervisors of this State when fixing and establishing anew or abolishing any previously established water rates as hereinbefore provided shall cause a record to be made thereof in the records of such board and cause the same to be published or posted in the manner and for the time required for the publication of said petition and notice."

And defendants aver that there is no other requirement in any statute relating to the record of the decision or action taken by the board of supervisors on such petition for the establishment of water rates.

And defenda-ts further allege that by the provisions of an act of the legislature of said State approved March 2nd, 1897 amending the aforesaid act of March 12, 1885, it is provided as follows:

SECTION 1. The act entitled "An act to regulate and control the sale, rental and distribution of appropriated water in this State, other than in any city, city and county or town therein, and to secure the rights of way for the conveyance of such water to the place of use," approved March 12, 1885, is hereby amended by inserting therein a new section, to be numbered section eleven and one-half thereof, as follows:

SECTION 11½. Nothing in this act contained shall be construed to prohibit or invalidate any contract already made, or which shall hereafter be made, by or with any of the persons, companies, associations, or corporations described in section two (2) of this act, relating to the sale, rental or distribution of water, or to the sale or rental of easements and servitudes of the right to the flow and use of wataer; nor to prohibit or interefere with the vesting of rights under any such contract.

SEC. 2. This act shall take effect immediately and be in force from and after its passage.

And these defendants admit that on the first day of September, 1897, M. T. Hall and others filed with the said board of supervisors, a petition praying that said board of supervisors regulate and control the rates and a compensation to be collected by the complainant for water furnished by it outside of cities and towns within the county of San Diego and that said petition is as set out in said complaint.

They further admit that the said petition was fixed for hearing the fourth day of October, 1897, and due notice was given thereof and that said petition came on regularly for hearing on said last-mentioned date, and that thereupon the consumers taking water from said system of complainant filed with said board their protest in words and figures set out in said complaint and that said protest was subscribed by Messrs. Haines & Ward and C. H. Rippey, attorneys for said consumers.

These *defenda-ts* admit that complainant through its general man-

ager and chief engineer furnished to said board certain statements and testimony relating to the value and original cost of the
61 mains, reservoirs, pipes, pipe lines and certain other property actually used and useful to the appropriation and furnishing of such water belonging to and possessed by complainant and also certain statements and evidence of amounts expended by complainant and its predecessor including the expenditures for repairs, management and operating its said works and also certain statements and evidence of certain extensions and enlargements and permanent improvements of said works and system.

These defendants deny that said statements and evidence of said value and cost, or the statements and evidence of said annual reasonable expenses of complainant and of the cost of its extensions and enlargements and permanent improvements of its works were complete or accurate.

These defendants deny that it is shown by said statements and evidence or either of them that the cost and value or cost or value of said water works and system reasonably amounted to the sum stated in said complaint, or that the value of said works and system amounted to said sum, or that the annual reasonable expenses including the cost of repairs, management and operating its works were, as alleged in said complaint, or that the cost of extension and enlargement thereof, were as in said complaint set forth.

These defendants further deny that no proof was made or evidence given before said board contrary to that furnished by said complainant and its officers.

These defendants admit that upon the conclusion of the evidence offered before said board upon the hearing of said petition, complainant requested said board, in writing, as set out in said complaint, and filed with said board its written request as contained in said complaint.

62 These defendants deny that said board failed or refused to make the *the* findings, or determine the matters set out in said request or either of them, or that said board did not find, or determine the value of complainant's plant, system and property actually used and useful to the appropraiting and furnsihing of such water or the annual reasonable expense of complainant including the costs of repairs, management and operating its said works.

And these defendants deny that said board did not determine or attempt to determine the cost of any extension enlargement or any other improvements of the water right or works of complainant or that said board did not, in fixing said rates, adjust or at-empt to adjust the same so that the net annual receipts and profits thereof, to complainant would be not less than six per cent. of the value of its said water works and plant actually used and useful to the appropriation and furnishing of such water to consumers, and they deny that said board did adjust said rates so as to yield complainant no net annual revenue or profit.

And these defendants aver that at the conclusion of the evidence and hearing and after the argument by counsel for the respective parties, said board did estimate, as required by law, the value of

complainant's pipes, pipe lines, reservoir site, reservoirs, and all other property actually used and useful to the appropriation and furnishing of such water belonging to and possessed by complainant, and that said board did, in like manner, estimate the annual reasonable expense of complainant including the cost of repairs, management and operating of such works and that said board did so adjust said rates as near as may be so that the net annual receipts and profits thereof for complainant will be and is not less
63 than six per cent. upon the said value of complainant's said property so used and useful to the appropriation and furnishing of water, and that said board, did in fixing said rates, act fairly and impartially and upon the evidence offered before it, relevant to said questions.

These defendants deny that said board of supervisors without finding or determining the matter or things that they were required by law to find and determine, or without ascertaining, or attempting to ascertain whether the rates fixed would return to complainant six per cent. of the value of its plant, as required by law, passed and adopted the ordinance set out in said complaint.

These defendants aver that after said board had found and determined and estimated the matters and things it was required by law to find, determine and estimate, and after in good faith attempting to ascertain, and ascertaining that the rates fixed would return to complainant six per cent. net on the value of its plant, said board passed and adopted the said ordinance set out in said complaint fixing and prescribing said rates.

These defendants do not know and are not informed how many of said petitioners are consumers or takers of water from complainant's system, or how many are in any way interested in the price or rates at or for which water is, or will be furnished by complainant, but upon information and belief, they state that some of said petitioners are owners of land irrigable from said system.

These defendants admit that there was at the time of filing the said complaint in this action, pending in this court a suit brought by Charles D. Lanning, receiver of the San Diego Land and Town Company of Kansas, against H. M. Osborne *et al.*, wherein the defendants are the same persons who appeared before the said
64 board of supervisors, and filed the protest above set forth. That in said action, the said receiver alleged that the said land and town company and he, as such receiver, had fixed and established a rate under the water system, then owned by said company, and being the same system now owned by your orator, as hereinafter alleged, of $7.00 per acre per annum, for irrigation; that the said defendants refused to pay said rate and were about to bring a multiplicity of suits to prevent the said receiver from collecting or enforcing the collection of said rates, and praying that said rate be declared legal, and that the defendants be enjoined from prosecuting suits in the State courts aforesaid. That said defendants appeared and answered to the bill of complaint therein amongst other things, that some of said defendants had purchased water rights from the said company, that some of them had purchased lands from

the said company with the water right attached, that other of said defendants had procured a water right to their lands by the voluntary furnishing of water thereto by said company without compensation, and that the company had contracted to and furnished water to all of said lands, at a rate of $3.50 per acre per annum, and alleging that by reason of their purchasing or otherwise procuring of said water rights, they were not bound to pay such rates as would return said complainant any profit, but were only bound to pay such rates as would meet the expense of repairs, operation and management of said plant; and that by reason of said company having fixed and established an annual rental of $3.50 per acre, for irrigation it was estopped to fix, charge, or collect a higher rate. That such proceedings were had in such cause that upon exceptions to said answer it was held and decided by this court that the matters set up in said answer were impertinent and insufficient, that the contracts
65 made by the said company as alleged in said answer were wholly void; that the said company, or its receiver, had the lawful right to change and re-establish its rates, and that the only remedy of the consumers and defendants, was to apply to the board of supervisors to fix and establish the rates.

And these defendants also admit that at the time of filing said complaint herein, and bringing of this action no final decree had been rendered in said action, above referred to, and that as to whether defendants in said action did express their intention to appeal from said decree when entered and refused to pay the rates established by said company as aforesaid these defendants have neither knowledge, remembrance, information or belief.

And these defendants also admit that in an action brought in this court of H. R. Mandell *et al.*, *vs.* The San Diego Land and Town Company, to foreclose the trust deed of said company to secure its bond, such proceedings were had that on the 14th day of April, 1897, a decree of foreclosure was duly made and entered by this court, ordering that the said receiver, Charles D. Lanning sell all of the property of said land and town company to satisfy the bonds of said company, and other of its debts, and the costs and expenses of the said receivership. That in pursuance of said decree the said property was, on the 14th day of June, 1897, sold by said receiver to Benjamin P. Cheney and Walter L. Frost. But these defendants on information and belief aver that in making said purchase said Cheney and Frost acted in behalf of complainant and paid for said purchase with its means. That said Cheney and Frost duly assigned all of their rights, under their said purchase, to complainant and said sale by said receiver was by this court duly confirmed and said receiver, on the 30th day of June, 1897, conveyed said prop-
66 erty to complainant, including the said water system and plant, and complainant has ever since been, and nowa is, the owner thereof, and has been and is now operating and managing the same, and is entitled to receive and collect reasonable rates and compensation for supplying water therefrom.

These defendants say that they do not know and have no information, knowledge or belief as to whether the said consumers of water

from complainant's system procured the said petitioners to file or prosecute the said petition before said board, and these defendants have no knowledge, remembrance, information or belief as to whether the said petitioners, because of not being willing to petition therefor themselves, or contending that rates different from those first established by said land and town company, could not be fixed or established either by complainant or said board of supervisors, or for any other reason, or at all procured said petitioners to file or prosecute said petition, in order that said consumers might insist upon or procure the fixing of rates upon the basis claimed by them of returning to complainant its expenses of operation and management, without any net revenue or profits to it, or for any other reason, or at all.

And these defendants say that they do not know, and cannot set forth their belief as to how many of said petitioners, were, or are, consumers of water from complainant's system or could not be injuriously affected by an adverse decision or any decision of said board of supervisors, or at all; but upon their information and belief defendants aver that some of said petitioners are owners of lands under and capable of irrigation from said system.

These defendants admit that said consumers did appear in said proceedings before said board and maintained and insisted that they were entitled to have the rates so fixed that they would yield
67 to complainant the expenses of operation and management only, without any net revenue or profit to it, and over the objections of complainant were allowed to make and did make proof of their respective purchases of water rights and purchases of land from the said land and town company, to the effect that water would be furnished to said lands so sold by it to some of said consumers for $3.50 per annum per acre for irrigation.

But these defendants deny that the said board of supervisors, instead of so fixing said rates as to return to complainant a net profit of not less than six per cent. upon the value of its plant, acted upon said protest or the proof made thereunder, or in pursuance of said protest or in violation of any provision of any statute set forth in said complaint, or of any statute of the State of California, or arbitrarily or injuriously, or without right so fixed said rates by said ordinance, so as to provide only for the expenses of repairing operating and managing its said plant by complainant, or so as to return to complainant no net profit whatever, or to make good or in any way provide for the natural depreciation of said plant.

And these defendants aver, that the said board of supervisors in fixing said rates and adopting said ordinance disregarded entirely said protest and the proof made thereunder and the said claims of said consumers, and established said rates by said ordinance in conformity with the requirements of law, and so as to yield *to* complainant six per cent. upon the present actual value of its plant after paying the expenses of repairing, operating and managing the same.

And these defendants further deny that the rates fixed by the said board of supervisors are unjust or unreasonable or that they will return to complainant no revenue whatever, or that if complainant

is compelled to furnish water at the rates so fixed it can do
68 so only at a continued actual loss to it, or at any loss to it, or that the enforcement of said rates will amount to the taking of complainant's property without compensation or to a confiscation thereof.

And these defendants deny that any other matter or thing in the said bill of complaint contained, and not herein and hereby well and sufficiently answered unto, confessed and avoided, traversed or denied, is true, to the knowledge or belief of them, or either of them.

All which matters and things these defendants are ready to aver, prove and maintain, as this honorable court shall direct, and pray to be hence dismissed with their costs and charges in this behalf most wrongfully sustained.

JAMES A. JASPER,
CHARLES H. SWALLOW,
JOHN GRIFFIN,
HOWARD M. CHERRY,
WM. JUSTICE,
Defendants.

A. H. SWEET,
San Diego, California, Solicitor for Defendants.

STATE OF CALIFORNIA, }
County of San Diego, Southern District of California, } ss:

We, James A. Jasper, Charles H. Swallow, John Griffin, Howard M. Cherry and William Justice, having read the foregoing answer and knowing the contents thereof and being first duly sworn depose and say: That the said answer is true of our own knowledge, except as to the matters which are therein stated on informatioa and belief, and as to those matters we believe it to be true.

JAMES A. JASPER.
CHARLES H. SWALLOW.
JOHN GRIFFIN.
69 HOWARD M. CHERRY.
WM. JUSTICE.

Subscribed and sworn to before me this first day of October, 1898.
[SEAL.] S. W. KROFF,
Notary Public in and for San Diego County, State of California.

(Endorsed:) No. 768. In the circuit court of the United States, southern district of California. The San Diego Land and Town Company, complainant, *vs.* James A. Jasper, *et al.*, defendants. Defendants' answer. Filed Oct. 3 1898 Wm. M. Van Dyke clerk. A. H. Sweet, San Diego, California solicitor for defendants.

70 In the Circuit Court of the United States for the Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, Complainant,
vs.
JAMES A. JASPAR ET AL., Defendants.

The replication of The San Diego Land and Town Company, complainant, to the answer of the defendants James A. Jaspar, Charles H. Swallow, John Griffin, Howard M. Cherry, and William Justice, members of and constituting the board of supervisors of San Diego county, State of California.

This repliant, saving and reserving unto itself now and at all times hereafter all and all manner of benefit and advantage of exceptions which may be had or taken to the manifold insufficiencies of the said answer for replication thereunto, says that it will aver, maintain and prove its said bill of complaint to be true, certain and sufficient in law to be answered unto, and that the said answer of the said defendants is uncertain, untrue and insufficient to be replied to by this repliant, without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto and not herein and hereby well and sufficiently replied unto, confessed or avoided, traversed or denied, is true, all which matters and things this repliant is and will be ready to aver, maintain and prove as this honorable court shall direct, and humbly prays as in and by its said bill it has already prayed.

71 WORKS, WORKS & INGLE,
WORKS & LEE,
Solicitors for Complainant.

(Endorsed:) No. 768 U. S. circuit court, ninth circuit, southern district of California. The San Diego Land and Town Company complainant *vs.* James A. Jaspar *et al.* defendants Replication Received copy of the within replication Oct. 10 1898 A. H. Sweet solicitor for defendants. Filed Oct. 11 1898 Wm. M. Van Dyke clerk Works, Works & Ingle Works & Lee rooms 420 to 425, Henne building, Los Angeles, Cal. solicitors for complainants.

72 In the Circuit Court of the United States of the Ninth Judicial Circuit in and for the Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.
No. 768.

The court having on the 22d day of August 1898, made and entered an order herein overruling the demurrer of the defendants M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D.

Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekampp, G. L. Good, William Rock, C. P. Janes, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer and D. C. Collier, and assigning said defendants to answer the bill on the October 1898 rule day of this court, and said defendants and each of them having failed to file their answer in accordance with said order of August 22d or at all,

It is now ordered on motion of Messrs. Works, Works & Ingle and Messrs. Works & Lee, solicitors for complainant that the default of said defendants M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Wins-
73 low, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer and D. C. Collier and of each of them be and the same hereby is entered and that the complainant's said bill of complaint be and the same hereby is taken *pro confesso* as against said defendants M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer and D. C. Collier and against each of them, and that all the matters and things therein prayed for be decreed accordingly.

WM. M. VAN DYKE, *Clerk.*

Filed and entered December 14th, 1898.
WM. M. VAN DYKE, *Clerk.*

I, Wm. M. Van Dyke, clerk of the circuit court of the United States, for the southern district of California, do hereby certify the foregoing to be a full, true and correct copy of an original order *pro confesso* made and entered by said court December 14th 1898, in the cause entitled The San Diego Land & Town Company, a corporation, complainant, *vs.* James A. Jasper, *et al.*, defendants, No. 768, and remaining of record therein.

74 Attest my hand and the seal of said circuit court, this 25th day of September, A. D., 1901.

[SEAL.] WM. M. VAN DYKE, *Clerk.*

(Endorsed:) No. 768 U. S. circuit court ninth circuit, southern district of California. The San Diego Land & Town Company, a

corporation, *vs.* James A. Jasper, *et al.*, Certified copy order *pro confesso* Filed Sep. 25 1901 Wm. M. Van Dyke clerk.

75 In the Circuit Court of the United States, Ninth Judicial Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER, CHARLES H. SWALLOW, JOHN GRIFFIN, Howard M. Cherry, and William Justice, Members of and Constituting the Board of Supervisors of San Diego County, State of California, Defendants. } No. 768.

The complainant filed its bill of complaint herein on the 27th day of October, 1897, which is hereto annexed.

A subpœna to appear and answer in said cause was thereafter on the 30th day of October, 1897, issued, returnable on the 6th day of December, 1897, which is hereto annexed.

On the 6th day of December, 1897, all of the defendants appeared herein by A. H. Sweet, Esq., their solicitor.

On the 3rd day of January, 1898, the defendants James A. Jasper, Charles H. Swallow, William Justice, John Griffin and Howard M. Cherry, as members of and constituting the board of supervisors of the county of San Diego, State of California, filed herein their demurrer to the bill of complaint, which is hereto annexed.

On the 3rd day of January, 1898, the defendants M. T.
76 Hall, *et al.*, filed herein their demurrer to the bill of complaint, which is hereto annexed.

Exceptions taken by all of the defendants to the bill of complaint were filed herein on the 3rd day of January, 1898, and are hereto annexed.

On the 9th day of March, 1898, the complainant filed its confession of certain of the exceptions of defendants to portions of the bill of complaint, which confession is hereto annexed.

On the 22nd day of August, 1898, the court made and entered herein an order overruling the exceptions and demurrers of defendants to the bill of complaint, a copy of which order is hereto annexed.

On the 3rd day of October, 1898, the answer of defendants James A. Jasper, *et al.*, members of and constituting the board of supervisors of San Diego county, State of California, to the bill of complaint was filed herein and is hereto annexed.

The replication of complainant to the answer of defendants was filed herein on the 11th day of October, 1898, and is hereto annexed.

On the 14th day of December, 1898, on motion of Messrs. Works, Works & Ingle and Messrs. Works & Lee, solicitors for complainant the default of defendants M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. C. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger,

M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray,
77 E. E. Shaffer and D. C. Collier, and an order taking complainant's bill of complaint *pro confesso* as against said defendants was duly entered in the order book, a copy of which order is hereto annexed.

Testimony was thereafter taken on behalf of the respective parties and filed in the clerk's office of said circuit court.

On the 25th day of June, 1900, being a day in the January term, A. D. 1900, of said circuit court, present: the Honorable Erskine M. Ross, circuit judge, said cause came on to be heard before the court on the pleadings and proofs, and the hearing having been proceeded with, and the court having heard the pleadings and proofs and the arguments of counsel, and the cause having thereupon been submitted to the court for its consideration and decision upon said pleadings, proofs and arguments and upon briefs which were thereafter filed, and the court having duly considered the same and being fully advised in the premises thereafter on the 26th day of August, 1901, being a day in the July term A. D. 1901, of said circuit court, ordered that a decree be entered herein dismissing the bill of complaint, and accordingly on the 25th day of September, 1901, a final decree was signed, filed and entered herein and is hereto annexed.

78 In the Circuit Court of the United States, Ninth Judicial Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant, vs. JAMES A. JASPER, CHARLES H. SWALLOW, JOHN Griffin, Howard M. Cherry, and William Justice, Members of and Constituting the Board of Supervisors of San Diego County, State of California, Defendants.	No. 768.	Decree.

This cause having heretofore been brought to a hearing upon the pleadings and proofs and having been argued by counsel for the respective parties, and submitted to the court for its consideration and decision, and thereafter, upon consideration thereof, the court having on the 26th day of August, 1901, being a day in the July term, A. D. 1901, of said circuit court of the United States for the southern district of California, delivered its opinion thereon and ordered that the bill be dismissed at complainant's cost,

It is ordered, adjudged and decreed, that the complainant's bill herein be and the same hereby is dismissed; and it is further ordered, adjudged and decreed that the defendants have and recover

of and from the complainant their costs and disbursements expended herein, taxed at $154.80.

Dated at Los Angeles, September 25th, 1901.

79 ROSS,
Circuit Judge.

Decree entered and recorded September 25th, 1901.
WM. M. VAN DYKE, *Clerk.*

(Endorsed:) No. 768 U. S. circuit court southern district of California. The San Diego Land and Town Company *vs.* James A. Jasper *et al.* Decree Filed Sep. 25 1901 Wm. M. Van Dyke clerk.

80 Whereupon, said bill of complaint, subpœna, demurrer of James A. Jasper, *et al.*, demurrer of M. T. Hall, *et al.*, exceptions of defendants to bill of complaint, confession of exceptions, copy of order overruling exceptions and demurrers, answer of defendants James A. Jasper, *et al.*, replication to answer, copy of order *pro confesso* as against defendants M. T. Hall, *et al.*, and said final decree are hereto annexed, said final decree being duly signed, filed and enrolled, pursuant to the practice of said circuit court.

Attest, etc., WM. M. VAN DYKE, *Clerk.*
[SEAL.]

(Endorsed:) No. 768 In the circuit court of the United States, ninth judicial circuit, for the southern district of California. The San Diego Land and Town Company, a corporation, *vs.* James A. Jasper, *et al.*, Enrolled papers. Filed September 25th 1901. Wm. M. Van Dyke clerk. Recorded decree. Register Book No. 2 page 547.

81 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND & TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

The bill in this suit shows upon its face that the complainant has acquired certain water, water rights, reservoirs, and a distributing system for furnishing water for domestic, irrigation, and other purposes to consumers within and outside of the city of National City, in the county of San Diego, State of California, together with a franchise for the impounding, sale, disposition and distribution of the water to such consumers; that the complainant and its predecessors in interest in procuring the said water and water rights, reservoirs, and distributing system expended up to October 4th, 1897, $1,026,022.79, of which amount there was expended the sum of $65,000 for the enlargement and extension of the system by constructing its "pipe line No. 2;" that all of the expenditures mentioned were reasonably necessary for the purposes stated, and

that the whole of the system so constructed is actually used and useful in the appropriation and furnishing of the water; that the annual reasonable expenses of the complainant, including the cost of repairs, replacements by reason of depreciation, management, and operation of the property, have amounted to not less than $20,000, and will amount to that sum, or more, for the current year; that the total receipts that can be derived
82 by the complainant at the rates fixed by the ordinance by the bill sought to be annulled, including all moneys received from the city of National City and its inhabitants under rates fixed by the board of trustees of that city, will not exceed the sum of $25,000 per annum; that the cost of putting in the distributing system within the city of National City, not including the costs incurred outside of the limits of the city, amounted to the sum of $183,753.90; that all of the mains and pipes of the complainant and other parts of its property so used in furnishing water to consumers are perishable property, and require to be replaced at least once in sixteen years, and require frequent repairs; that one of the large mains of the complainant so used for supplying water to consumers has so depreciated as to render it necessary to replace a large portion thereof during the present year, at a cost to the complainant of not less than $12,000 and that there are other pipe lines of the complainant that have so depreciated that it will be necessary to replace the same at large expense in the near future, and that the annual depreciation of the entire system will amount to not less than $44,000; that the amount that can be realized from the city of National City and its inhabitants per annum under the rates fixed by the board of trustees of that city, and now in force, has not heretofore, and will not in the near future, exceed the sum of $13,200; that the value of the water, water rights, reservoirs, franchises and property necessary for the proper operation of its business, and now owned by the complainant, is $1,026,022.79.

The bill, after referring to provisions of the constitution and statutes of the State of California, respecting the use of all waters now appropriated or that may be hereafter appropriated for irrigation, sale, rental, or distribution, alleges that on the 1st day of September, 1897, the 25 individual defendants other than the members
83 of the board of supervisors of San Diego county, filed with that board a petition praying it to regulate and prescribe the rates and compensation to be collected by the complainant for water so furnished by it within the county of San Diego outside of its cities and towns; that the hearing of the petition was fixed for the 4th day of October, 1897, and due notice thereof given; that the petition came on regularly for hearing at the time appointed, and that thereupon the consumers taking water from the complainant's system of water works, none of whom were petitioners, filed with the board this protest:

"To the honorable board of supervisors:

The present consumers of water for irrigation from the system of the San Diego Land and Town Company, who live outside of the

city of National City, hereby allege and claim that each of them respectively has by purchase or otherwise become the owner of a right to the flow and use of so much of the water appropriated by said company for sale, rental, and distribution, as is necessary to irrigage his or her respective tracts of land under said company's system; that to each of said tracts of land the said company or its predecessor in title did, by its consent and voluntary act, annex the easement of the right to the flow and use of water from said system for irrigation of such tract, in freehold; that each such consumer has fully paid or otherwise satisfied said company and its predecessors for the full price and value of such water right; and that none of such consumers, nor any of the lands of such consumers are liable to pay to said company any water rate other than their due proportion of the annual reasonable expenses of such company to cover the cost of repairs, management, and operation of the works used and useful to the appropriation and furnishing of such water to such lands.

84 And each and all said consumers protest against the fixing of any rates as to them, to provide or create net annual receipts and profits upon the value of said company's water system so used and useful for the appropriation and furnishing of such water to their respective lands.

HAINES & WARD,
C. H. RIPPEY,
Attorneys for said Consumers."

The bill alleges that the complainant furnished to the board of supervisors full, complete, and accurate statements and proof of the value and cost of the dams, reservoirs, pipes, pipe lines, and all other property actually used and useful to the appropriation and furnishing of such water belonging to and possessed by the complainant, and also its annual reasonable expenses, including the cost of repairs, management, and operating its works, and also the cost of all extensions, enlargements and other permanent improvements; that it was shown by such statements and proof that the cost and value of the water works and system of the complainant amounted to the sums already stated, and that the annual reasonable expenses, including the cost of repairs, management, and operating the works, and the cost of extensions and enlargements were as stated; that no proof was made or evidence given to the contrary by the petitioners or any one else; that the complainant, upon the conclusion of the evidence, requested the board in writing to find and determine the following matters:

"1. The value of the dam, reservoir, water rights, and distributing system, and all other property actually used by the company and useful to the appropriation and furnishing of such water.

85 2. The annual reasonable expenses of the company, including the cost of repairs, management, and operating its works.

3. The cost of any extensions, enlargements, or other permanent improvements of the water works of the company since the original construction of its plant.

4. The amount of depreciation of the plant of the company by natural wear from use and the action of the elements, either by way of percentage per annum of such deterioration, or the gross sum thereof for the years since the company commenced to furnish water.

5. The rates for irrigation necessary to be charged, together with the domestic rates, in order to return to the company net annual receipts and profits of not less than six per cent. upon the value of its property as found by the board."

It is alleged that the board wholly failed and refused to make the findings or determine the matters set forth in the request; or any or either of them, and that the board did not find or determine the value of the complainant's property actually used and useful in the appropriation and furnishing of the water, or the annual reasonable expenses of the complainant, including the cost of repairs, management, and operating the works, nor did it determine or attempt to determine the cost of any extensions, enlargements, or other permanent improvements, nor did it in fixing the rates, adjust or attempt to so adjust the same as that the net annual receipts and profits thereof to the complainant would be not less than six per cent. on the value of its water works and plant actually used and useful in the appropriation and furnishing of such water to consumers, or any net annual receipt or profits whatever.

It is alleged that the board, without finding or determining the matters and things they were required by law to find and
86 determine, and without ascertaining or attempting to ascertain whether the rates fixed would return to the complainant six per cent. net on the value of its plant, passed and adopted an ordinance which is set out at large in the bill. It is alleged that not one of the petitioners before the board was a consumer or taker of water under or from the complainant's system, or in any way interested in the price or rates at or for which water is or will be furnished by the complainant; that there is pending in this court a suit brought by Charles D. Lanning, receiver of the San Diego Land and Town Company of Kansas (predecessor in interest of the complainant), against H. M. Osborne, *et al.*, wherein the defendants are the same persons who appeared before the board of supervisors and filed the protest above set forth; that in that action the said receiver alleged that the land and town company, and he as its receiver, had fixed and established a rate under the water system then owned by that company, and now owned by the complainant, of $7.00 per acre per annum for irrigation; that the defendants to the suit refused to pay that rate and were about to bring a multiplicity of suits to prevent the receiver from collecting or enforcing the collection of the seven-dollar rate, and praying that that rate be declared legal and the defendants to the suit be enjoined from prosecuting suits in the State courts; that the defendants to the suit appeared and answered the bill of complaint therein, setting up, among other things, that some of the defendants had purchased water rights from the company, that some of them had purchased lands from the company with the water right attached, that others of said defendants had procured a water right to their lands by the voluntary furnish-

ing of water thereto by the company without compensation,
87 and that the company had contracted to furnish, and had furnished water to all of the lands at a rate of $3.50 per acre per annum, and alleging that by reason of their purchasing or otherwise procuring of said water rights, they were not bound to pay such rates as would return the company any profit, but were only bound to pay such rates as would meet the expense of operation and management of the plant, and that by reason of the company having fixed and established an annual rental of $3.50 per acre for irrigation, it was estopped to fix, charge, or collect a higher rate; that such proceedings were had in that suit that upon exceptions to the said answer it was held and decided by this court that the matters set up in said answer were impertinent and insufficient, that any contracts made by the company as alleged in its answer were void, that the company or its receiver had the lawful right to change and re-establish its rates, and that the only remedy of the consumers and defendants was to appeal to the board of supervisors to fix and establish the rates; that no final decree has yet been rendered in that suit, but the defendants thereto avow their intention to appeal from the decree of this court when entered, and still refuse to pay the rates established by the company.

It is alleged that the said consumers, not being willing to petition therefor themselves, and contending that rates different from those first established by the land and town company could not be fixed or established either by the complainant or by the board of supervisors, nevertheless procured the individual defendants to the present suit to file the aforesaid petition to the board of supervisors of San Diego county in order that the said consumers might
88 insist upon and procure the fixing of rates upon the basis claimed by them of returning to the complainant its expenses of operation and management only, without any net revenue or profit to it; that said consumers did appear in the proceeding before the board of supervisors of San Diego county, and by their protest, and otherwise, maintain and insist that they were entitled to have the rates so fixed, and in support of their contention, and over the objections of the complainant, they were allowed to and did make proof of their respective purchases of water rights and purchases of lands from the land and town company, and of representations made by that company to the effect that water would be furnished to the land sold by it to some of said consumers for $3.50 per acre per annum for irrigation, and that the board of supervisors instead of fixing the rates so as to return to the complainant a net profit of not less than six per cent. upon the value of its plant, acted upon the said protest and the proof made thereunder, and in pursuance thereof, and in violation of the express provisions of the statute of the State of California, arbitrarily, unjustly, and without right, so fixed the rates by the ordinance set out in the bill, as to provide for the expenses of operating and managing the complainant's plant and so as to return to the complainant no net profit whatever, or to make good or in any way provide for the natural depreciation of the plant.

It is alleged that the rates so fixed by the board of supervisors are unreasonable and unjust, and will return to the complainant no revenue whatever; and if the complainant is compelled to furnish water at the rates so fixed, it can do so only at a continual actual loss to it.

To the bill the defendants filed exceptions and also demurrers, which are now for disposition.

89 It is declared by the constitution of the State of California that the use of all water now appropriated or that may hereafter be appropriated for sale, rental, or distribution, is a public use, and subject to the regulation and control of the State, in the manner to be prescribed by law, with certain specific provisions not pertinent to the present question. It is further provided by that constitution that the right to collect rates or compensation for the use of water supplied to any county, city and county, or town, or the inhabitants thereof, is a franchise, and cannot be exercised except by authority of and in the manner prescribed by law. (Sections 1 and 2, article 14, const. of 1879.)

Pursuant to those constitutional provisions the legislature of the State in March, 1885, passed an act entitled "An act to regulate and control the sale, rental, and distribution of appropriated water in the State other than in any city, city and county, or town therein, and to secure the rights of way for the conveyance of such water to the places of use." (Cal. Stats. 1885, p. 95.) By the terms of this act the boards of supervisors of the several counties are given power and it is made their duty, in the manner prescribed by the act, to fix the maximum rates at which any person, company, or corporation may sell, rent, or distribute water appropriated for the purpose. The circumstances and conditions under which such board is authorized and required to do that thing are prescribed by sections 3, 4, 5 and 6 of the act. The action of the board can only be invoked in the first instance by a petition in writing of not less than 25 of the inhabitants who are tax-payers of the county. It was pursuant to that provision of the State statute that the petition of the 25 individual defendants to the

90 present suit was filed with the defendant board of supervisors for the fixing of the rates in question. The statute provides that when such a petition so signed has been presented, the board of supervisors, upon giving the notice required, is empowered to examine witnesses; to send for persons, books, and accounts; to ascertain the value of the water system and the reasonable expenses of its management and operation, including the cost of repairs, together with all other facts, circumstances, and conditions pertinent to the question, and after such investigation and consideration to fix and establish the maximum rates at which the water shall be sold, rented, or distributed to the inhabitants of the county outside of any city, town, or other municipality; the board being empowered to establish different rates for water furnished for the different uses, such as mining, irrigation, mechanical, manufacturing, and domestic, but being required to make them equal and uniform as to each class, and being further required to "so adjust them that the net

annual receipts and profits thereof to the said persons, associations, and corporations so furnishing such water to such inhabitants shall not be less than six nor more than eighteen per cent. upon the said value of the canals, ditches, flumes, chutes, and all other property actually used and useful to the appropriation and furnishing of such water of each of such persons, companies, associations, and corporations, but in estimating such net receipts and profits, the cost of any extensions, enlargement, or other permanent improvements of such water rights or water works shall not be included as part of the said expenses of management, repair, and operating of such works, but when accomplished may and shall be included in the present cost and cash value of such works."

91 The bill alleges, as has been seen, that the defendant board of supervisors did not find or determine the value of the complainant's property actually used and useful in the appropriation and furnishing of the water or the annual reasonable expenses of the complainant, including the cost of repairs, management, and operating the works, nor did it determine or attempt to determine the cost of any extensions, enlargements, or other permanent improvements, nor did it, in fixing the rates complained of, adjust or attempt to so adjust them as that the net annual receipts and profits thereof to the complainant would be not less than six per cent. on the value of its water works and plant actually used and useful in the appropriation and furnishing of such water to consumers or any net annual receipt or profits whatever; that the board acted upon the protest filed by the consumers and the proof made thereunder, and, in violation of the provisions of the State statute, arbitrarily, unjustly, and without right so fixed the rates by the ordinance complained of as to provide for the expenses of operating and managing the complainant's plant, but so as to return to the complainant no net profit or to make good or in any way provide for the natural depreciation of the plant. The bill alleges that the total receipts that can be derived by the complainant at the rates fixed by the ordinance, including the $13,200 received from the city of National City and its inhabitants under rates fixed by the board of trustees of that city, will not exceed the sum of $25,000 per annum; that is to say, $11,800 from consumers outside of the city of National City.

92 It is alleged that the annual reasonable expenses of the complainant, including the cost of repairs, replacements by reason of depreciation, management, and operation of the property, have amounted to not less than $20,000, and will amount to that sum or more, for the year to come; that the cost of putting in the distributing system within the city of National City, not including the costs incurred outside of the limits of the city, amounted to the sum of $183,753.90; that the annual depreciation of the entire system amounts to not less than $44,000, and that the value of the entire property is $1,026,022.79.

It undoubtedly devolves upon the complainant to show that the rates established by the ordinance complained of will not yield a fair interest on the value of that portion of its property properly referable to that portion of the county of San Diego outside of the

limits of National City, making due allowance for the cost of its maintenance and the depreciation of the plant by reason of its wear and tear, and having due regard also to the rights of consumers. *San Diego Land & Town Company v. City of National City*, 74 Fed. Rep. 79, 87; *Smyth v. Ames*, 168 U. S. Rep. 466, 540. In the present bill it is alleged that under the rates established by the board of trustees of the city of National City, the complainant realizes for water furnished to consumers within that city $13,200. The presumption is that those rates are just and reasonable, and there is nothing shown to the contrary. That leaves, according to the averments of the bill, $11,800 as the maximum amount that can be realized by the complainant under the ordinance complained of for water furnished to consumers within the county of San Diego outside of the limits of the city of National City; out of which to pay and make good the annual expense of operating and maintaining the plant by which the water is furnished, its annual depre-
93 ciation, and a fair interest on the value of the property invested in the undertaking. The first of these items is alleged to be, for the entire system, $20,000, and the second $44,000. As it is averred that but $183,753.90 in value of the entire system (alleged to be of the value of $1,026,022.79,) is within the city of National City, these specific averments certainly tend strongly to support the allegations of the bill to the effect that at the rates established by the ordinance complained of the entire revenue that can be collected by the complainant will yield no net income, and will be insufficient to defray the annual cost of operating and maintaining the plant and make good its annual depreciation by wear and tear. These averments are admitted by the demurrers; they may not be true in fact, but for present purposes are to be accepted as true. So taking them, it cannot be doubted, I think, that the bill makes a good case. Individuals, companies, and corporations who engage in the business of furnishing water to the public under the provisions of the constitution and statutes of the State of California, do so, as this court has of late had frequent occasion to observe, subject to the right on the part of the public instrumentaiities to fix the rates at which the water shall be so furnished; but with the guarantee afforded by that paramount provision of the 14th amendment of the Constitution of the United States, which, in effect, declares that such rates shall not be so fixed as to deprive the person furnishing the water of his property without just compensation.

In considering a similar question in *San Diego Land & Town Company v. City of National City*, 74 Fed. Rep., 79, 83, this court said:

"As it is firmly established that it is within the scope of judicial power, and a part of judicial duty, to inquire whether rates
94 so established operate to deprive the owner of his property without just compensation, it seems to me that it logically follows that, if the court finds from the evidence produced that they are manifestly unreasonable, it is its duty so to adjudge, and to annul them; for it is plain that if they are manifestly unreasonable they cannot be just. In the solution of that problem many consid-

erations may enter; among them, the amount of money actually invested. But that is by no means, of itself, controlling, even where the property was at the time fairly worth what it cost. If it has since enhanced in value, those who invested their money in it, like others who invest their money in any other mind of property, are justly entitled to the benefit of the increased value. If, on the other hand, the property has decreased in value, it is but right that those who invested their money in it, and took the chances of an increase in value, should bear the burden of the decrease. In my judgment, it is the actual value of the property at the time the rates are to be fixed that should form the basis upon which to compute just rates; having, at the same time, due regard to the rights of the public, and to the cost of maintenance of the plant, and its depreciation by reason of wear and tear. If one has property to sell, it is its present value that is looked to, one element of which may very properly be its cost, but one element only. So, too, if one has property to lease, it is its present value, rather than its cost, upon which the amount of rent is based. And if, as said by Mr. Justice Brewer in Ames *v.* Railway Co., (64 Fed. 165, 177,) the public were seeking to condemn the property in question for a greater public use, if that be possible,
its present value, and not its cost, is that which the public
95 would have to pay. It follows, I think, that, where the public undertakes to reduce the rates to be charged for the use of such property, it is its present value, and not its cost, that must be taken as a basis upon which to fix reasonable and just rates; having due regard to the cost of its maintenance, to its depreciation by reason of wear and tear, and also to the rights of the public. If, upon such a basis, a fair interest is allowed, no just cause of complaint can exist."

The views thus expressed were not in accord with those of some other courts, but are in accord with those expressed by the Supreme Court in the late case of *Smyth v. Ames*, 169 U. S., 466, 546, where that court said:

"We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public. And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use
of a public highway than the services rendered by it are
96 reasonably worth."

It is, no doubt, a difficult matter to, at all times, fix rates

that will be just both to the consumers, who constitute the public, and to those who furnish the money and perform the service. Perhaps in such matters, as in some others, absolute justice is unattainable. But, certainly, as near an approach to it ought to be made as is practicable. This can only be done by all parties in interest approaching the problem in a spirit of fairness. It is not only right to do so, but, from the low standpoint of policy, it is best. While the presumptions of law are always in favor of the rates established by the regularly constituted authorities, yet when they are shown to be manifestly unreasonable they must always be annulled as unjust, at the suit of the aggrieved party.

The duties devolved upon the defendant board of supervisors by the State statute already referred to are plainly pointed out and prescribed. There is not found among them that of considering or deciding legal rights that properly pertain to the court for decision.

Neither of the exceptions or demurrers is, in my opinion well taken.

An order will be entered overruling the exceptions and the demurrers, with leave to the defendants to answer within twenty days.

ROSS,
Circuit Judge.

(Endorsed:) No. 768 U. S. circuit court ninth circuit, southern district of California. San Diego Land and Town Co. a corporation *vs.* James A. Jasper *et al.* Opinion Filed Aug. 22 1898 Wm. M. Van Dyke clerk. By E. H. Owen deputy

97 In the United States Circuit Court, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

The complainant is a corporation of the State of Maine, having succeeded to the rights of a Kansas corporation of the same name in and to the property described in the bill, the object of which is to obtain a decree annulling certain water rates established by the board of supervisors of San Diego county. To a clear understanding of the case it is necessary to refer to certain prior suits, in which the predecessor in interest of the present complainant was involved, one of which was a suit brought against the city of National City to set aside a certain ordinance fixing the rates at which the San Diego Land and Town Company should furnish that city and its inhabitants with water for domestic purposes and purposes of irrigation. (San Diego Land & Town Co. *vs.* City of National City, 74 Fed. 79.) It was there shown, what is partly shown in the present record, that the chief object of the land and town company was the acquiring of land and the subdividing and selling of it for profit. In pursuance of that purpose the complainant did acquire large tracts in San

Diego county in what is known as the Sweetwater valley, in Chula Vista, and in National City (all within the boundaries of the National rancho), and in the Otay valley, adjacent to
98 that rancho on the south, and in the territory known as the ex-mission lands, adjacent to National City on the north, aggregating many thousands of acres. Almost all of the lands were dry and in their natural condition were of but little value. Principally for the purpose of adding to their value and of enabling the company to sell them to advantage, the complainant, in the years 1886 and 1887, appropriated, under and by virtue of the constitution and laws of California, the waters of the stream known as the Sweetwater river, and for the purpose of impounding those waters, in order that it might distribute and sell them in connection with its lands, and likewise distribute and sell them to other land-owners and individuals within their flow, for purposes of irrigation and domestic and other beneficial uses, proceeded to construct across the bed of the stream a large dam known as the Sweetwater dam. Connecting therewith the complainant constructed a system of main and lateral pipes, called "pipe system No. 1," from which it commenced to serve the consumers of water in February, 1888. As constructed, pipe system No. 1 covered a large territory, much the larger protion of which was owned by the company. Its Chula Vista tract, consisting of about 5,000 acres, it laid out and platted in blocks of 40 acres each and subdivided those blocks in lots of 5 acres each, to each of which its pipes were extended. National City embraces about 3,375 acres of land, of which about 833 are laid out into 6691 town lots, of which the complainant, in January, 1887, owned 2849, and of the remaining acreage the complainant then owned 685 acres. When the city ordinance involved in the case of San Diego Land and Town Company *v.* The City of National City was enacted the complainant still owned 2671 city lots and owned about the same acreage within the city. The total population of National City was then about 1300, and the aggregate number of acres then
99 under irrigation within the city limits was about 747. The complainant's main and lateral pipes were laid in the streets of the city by virtue of a franchise granted by its authorities pursuant to the provisions of section 2 of article XIV of the constitution of the State of California, which declares:

"The right to collect rates or compensation for the use of waters supplied to any county, city and county, or town, or the inhabitants thereof, is a franchise, and cannot be exercised except by authority of and in the manner prescribed by law."

The pipes were so laid as to reach the lots and farming lands of the company within the city, as well as the lots and farming lands of others therein, and were extended through the city to supply a portion of the lands to the north, a part of which were owned by the company and a part by third persons. The pipes of the company's system No. 1 were also so laid as to supply water to the land and its inhabitants adjoining National City on the south, much of which land was owned by the company and much of it by other persons. As the territory covered by the pipe system was then—and indeed

yet is—very sparsely settled, it is manifest that it was laid for the purpose of attracting the purchase and settlement of the lands and in anticipation of a future demand for the water and was far in advance of the then demand for it. Naturally and necessarily in carrying into execution those objects a great deal of money was expended by the company. The testimony on behalf of the complainant in the National City case was, and the testimony on behalf of the complainant in the present suit is, to the effect that in acquiring the water and reservoir system and in putting in the dam and system of pipes necessary to supply consumers thereunder with water, the company actually expended $1,022,473.54. The company subsequently constructed another system of pipes, called "pipe system No. 2," at a cost of about $65,000, for the purpose of relieving the pressure upon its system No. 1 and thereby to increase its efficiency and to supply lands not reached by that system. From at least as early as the com-
100 pletion of its pipe system No. 1 the original company, by public advertisement and otherwise, offered and held its farming and orchard lands and its lots in National City for sale, representing the water of its system to be piped to and over its lands and lots, and up to December 18, 1892, represented that an abundance of water would be supplied to purchasers of such lands for their irrigation at the rate of $3.50 per acre per annum, and for city lots in ample quantity and at cheap rates. Under those representations it sold a large number of acres of farming and orchard lands in separate tracts and widely scattered, to all of which purchasers it furnished water for purposes of irrigation at the rate of $3.50 per acre per annum. And it also furnished water for purposes of irrigation to various other persons whose lands are within its flow at the same rate of $3.50 per acre per annum. But commencing with December 18, 1892, and extending to February, 1895, the company demanded of all consumers of water, other than those to whom it had furnished water for irrigation prior to that date, the sum of $50 per acre, where water is required for purposes of irrigation, in addition to the annual charge, for what it denominated a "water right;" and thereafter it demanded $100 per acre, in addition to the annual charge, for a so-called "water right" for irrigation purposes from all persons other than those to whom it had furnished water for those purposes prior to December 18, 1892. One of the objects of the suit against National City was the establishment of the validity of the claim of the company to exact a sum of money in addition to an annual charge as a condition on which alone the company would furnish consumers with water for irrigation purposes other than those to whom it had furnished it for such purposes prior to December 18, 1892; and the contest that arose between the consumers and the company over that charge, and the refusal of the municipal authorities of National City to allow the charge in respect to acreage property within the city limits, was one of the principal
101 causes of that suit. This court decided against the validity of the exaction for the so-called "water right," and also held that the rates established by the city council were not so low as to

justify the court in interfering with them on the ground that they amounted to the taking of the company's property without just compensation. On appeal to the supreme court the judgment here given was affirmed—the supreme court, however, not finding it necessary to determine the question as to the validity of the exaction for the so-called "water right." (174 U. S. 739.)

Some time after the bringing of the suit of The San Diego Land and Town Co. *v.* City of National City, the property of that company passed into the hands of a receiver, who, during the course of the administration of his trust, raised the rates at which water had heretofore been furnished to the consumers for irrigation purposes from $3.50 to $7 per acre per annum, and that action on his part gave rise to the litigation involved in the suit of Lanning *v.* Osborne, *et al.*, brought in and decided by this court and reported in 76 Fed. 319. In that case the validity of the exaction of money for the alleged "water right" as a condition precedent to the furnishing of water by the company for the purposes of irrigation was again considered, and decided by this court as before, and there was also involved and determined by this court the question as to whether the company was estopped from changing the rate, and the further question of power on the part of the company to fix a reasonable charge for the furnishing of such water in the absence of any action under the act of the legislature of the State of California approved March 12, 1885, entitled "An act to regulate and control the sale, rental and distribution of appropriated water in this State, other than in any city, city and county, or town therein, and to secure the rights of way for the con-
102 veyance of such water to the places of use." (Stats. of 1885, p. 95.) That decision of this court was also under review by the supreme court on an appeal from its judgment dismissing a bill filed for the review of the decision, and resulted in the affirmance of the judgment here given—the supreme court, however, again finding it unnecessary to decide the question as to the validity of the exaction for the so-called "water right." (Osborne *v.* San Diego Land and Town Co., 178 U. S. 22.) A similar ruling was made by this court in respect to the so-called "water right" in the cases of Mandell, *et al. v.* San Diego Land and Town Co., 89 Fed. 295, and Souther *et al. v.* San Diego Flume Co., not reported. On appeal from the judgment of this court in the last-mentioned case the circuit court of appeals for this circuit reversed the judgment and held valid a contract exacting $9,000 as a condition precedent to the right of a consumer to use water that had been appropriated under and pursuant to the provisions of the constitution of California of 1879 and of the statutes of the State passed in pursuance thereof, for sale, rental and distribution, in addition to the legally established rates for its use. (San Diego Flume Co. *v.* Souther, 90 Fed. 164.) But the court of appeals subsequently granted a rehearing of the case, which was pending at the time the supreme court of California decided the case of Fresno Canal Co. *v.* Park, 129 Cal. 437, after which the circuit court of appeals again decided the appeal in the case of San Diego Flume Co. *v.* Souther and reaffirmed its former ruling, saying in its

opinion (104 Fed. 706), among other things, that the question had been set at rest by the decision of the supreme court of California in the case of Fresno Canal Co. *v.* Park. Although that case seems to be generally regarded as sustaining the validity of such ex-
103 actions for the right to use water appropriated under the provisions of the constitution of California of 1879 and of the statutes of the State passed in pursuance thereof, a reference to the case as reported fails to show that any such point was involved. The facts upon which the decision was based are set out in the opinion of the court at page 439 as follows:

"The respondent is a corporation organized in February, 1871, for the purpose of straightening, improving, etc., the natural channel of Kings river and its branches, and taking water therefrom by means of canals and ditches for various beneficial uses, and, among others, for the disposition of the waters and 'collecting annual rents and charges therefor.' On March 28, 1892, respondent and one E. B. Perrin executed a written instrument, which was duly acknowledged by the parties and was recorded on the 31st of the same month. Plaintiff's canals and ditches run through an agricultural region and do not furnish water within any city, town, or municipality. The covenants of this instrument necessary to be mentioned here are as follows: The respondent, in consideration of a certain sum of money then paid it by Perrin, covenanted to furnish to the latter from its main canal, or from a branch thereof, all the water that may be required for the irrigation of a described piece of land then owned by him, for a certain number of years commencing May 28, 1892, 'not exceeding at any time one cubic foot per second.' The respondent agreed to put a suitable gate in the bank of the canal at the most convenient point for the conveyance of water to Perrin's land; and Perrin agreed to construct a ditch from the gate to his land at his own cost, etc. Perrin agreed that he would not use the water, or permit it to be used, on any land other than that described in the instrument,
104 and would not permit it to run to waste, and would provide means to carry any surplus water back to the respondent's canal. It was declared that the water to be thus furnished was intended to be an appurtenance to and to run with the land, that the right thereto was to be transferable only with the land, and that respondent was to be bound by the instrument only to subsequent owners of the land. Perrin covenanted for himself, his heirs, assigns and successors in interest, for the payment annually to respondent of the sum of one hundred dollars on the first day of September of each of the years mentioned. It is agreed, also, that respondent might make a number of similar contracts with other persons, and that if at any time the aggregate quantity of water should be insufficient to supply all the contractors, Perrin, and each of the others, should receive his proportionate share. It was declared that the covenants of Perrin should run with and 'bind the land.'"

It will be readily seen from the facts thus stated that there was nothing to show that the appropriation of the water there in question was made under and by virtue of the provisions of the consti-

tution of California of 1879. On the contrary, the implication is strong, from the fact that the respondent corporation in that case was organized in February, 1871, for the purpose of appropriating water from Kings river for sale, that the appropriation was made long prior to the adoption of the constitution of California of 1879. And that the court must have understood such to have been the fact would seem to appear from its reference to the well-known history of the State that from its foundation the waters pertaining to the public lands of both the Federal and State governments have been appropriated, used and sold for mining, agricultural and other useful purposes, which appropriation and use were from the
105 beginning encouraged, recognized and sanctioned by the legislature of the State, by its supreme court in numerous cases, and subsequently by the legislation of Congress, and by the decisions of the Supreme Court of the United States. All of this was abundantly shown in my dissenting opinion in the case of Lux *v.* Haggin, 69 Cal. 442. In none of the cases decided by this court to which reference has been made was it ever doubted that the appropriators of water upon the public lands under that condition of the law, possessed the right to sell or otherwise dispose of such appropriated water upon any terms and conditions that might be agreed upon; but the question with which this court was called upon to deal in the cases referred to involved appropriations made under and pursuant to the provisions of the constitution of California of 1879, which presented a very different question, and which, as it seems to me, does not appear to have been the case involved in Fresno Canal Co. *v.* Park, 129 Cal. 437. It is true that in that case the supreme court of the State does discuss the provisions of the constitution of 1879 and of the legislative acts adopted in pursuance thereof and does hold that they do not take away the right of a furnisher of water for irrigation purposes to collect rates or compensation fixed by contract, in the absence of statutory provisions prescribing the rates to be charged therefor. It should be remembered however that the contract there involved was one by which the parties agreed upon an annual charge of one hundred dollars for the use of the water, which, so far as appeared, had been appropriated long prior to the adoption of the constitution of California of 1879. It did not appear in that case that the appropriator exacted any sum of money or other thing as a condition precedent to the right to use the water in
106 addition to the rates to be lawfully fixed for its use, and, least of all, that it exacted any money or other thing as a condition precedent to the right to use water appropriated under the provisions of the constitution of the State of 1879, which declares water appropriated under its provisions to be "charged with a public use." But the decision of the supreme court of the State in the case of Fresno Canal Co *v.* Park was treated by the circuit court of appeals in the decision of the case of San Diego Flume Co. *v.* Souther, as appears from its opinion reported in 104 Fed. 706, as having construed the constitution of California of 1879 and the State statutes passed in pursuance thereof as declaring that an appropriator of

water under and pursuant to their provisions, for sale, rental or distribution, has the right to exact a sum of money or other thing, in addition to the legally established rates, as a condition upon which he will furnish to consumers water so appropriated, and by that decision of the circuit court of appeals, this court is, of course, bound.

In California, as has already been shown, the constitution itself provides that the rates or compensation to be collected by any person, company or corporation for the use of water supplied to any city, town or municipality shall be fixed in the month of February of each year by the action of the governing body of such city, town or other municipality, "by ordinance or otherwise, in the manner that other ordinances or legislative acts or resolutions are passed by such body, and shall continue in force for one year and no longer." The rates to be charged for water appropriated under and by virtue of the constitution and laws of the State to persons outside of
107 such cities, towns and other municipalities were, by the constitution, left to be provided for by the legislature, and this the legislature of California did by the act above referred to, approved March 12, 1885. By the terms of that act the boards of supervisors of the several counties of the State are given power, and it is made their duty, in the manner prescribed in the act, to fix the maximum rates at which any person, company or corporation may sell, rent or distribute water appropriated for the purpose. The circumstances and conditions under which such boards are authorized and required to do that thing are prescribed by sections 3, 4, 5 and 6 of the act. The action of the board can only be invoked in the first instance by a petition in writing of not less than 25 inhabitants who are tax-payers of the county. When such a petition, so signed, has been presented, the board, upon giving the notice required, is, by the statute, empowered to hear the petition. What it is thereafter authorized and required to do may be best seen by inserting sections 4 and 5 of the act, which are as follows:

"SEC. 4. At the hearing of said petition the board of supervisors shall estimate, as near as may be, the value of the canals, ditches, flumes, water chutes, and all other property actually used and useful to the appropriation and furnishing of such water, belonging to and possessed by each person, association, company, or corporation, whose franchise shall be so regulated and controlled; and shall in like manner estimate as to each of such persons, companies, associations, and corporations, their annual reasonable expenses, including the cost of repairs, management, and operating such works; and, for the purpose of such ascertainment, may require the attendance of persons to give evidence, and the production of papers, books, and accounts, and may compel the attendance of such persons and
108 the production of papers, books, and accounts, by attachments, if within their respective counties.

"SEC. 5. In the regulation and control of such water rates for each of such persons, companies, associations, and corporations, such board of supervisors may establish different rates at which water may and shall be sold, rented, or distributed, as the case may be; and may also establish different rates and compensation for such water

so to be furnished for the several different uses, such as mining, irrigating, mechanical, manufacturing, and domestic, for which such water shall be supplied to such inhabitants, but such rates as to each class shall be equal and uniform. Said boards of supervisors, in fixing such rates, shall, as near as may be, so adjust them that the net annual receipts and profits thereof to the said persons, companies, associations, and corporations so furnishing such water to such inhabitants shall be not less than six nor more than eighteen per cent. upon the said value of the canals, ditches, flumes, chutes, and all other property actually used and useful to the appropriation and furnishing of such water of each of such persons, companies, associations, and corporations; but in estimating such net receipts and profits, the cost of any extensions, enlargements, or other permanent improvements of such water rights or water works shall not be included as part of the said expenses of management, repairs, and operating of such works, but when accomplished, may and shall be included in the present cost and cash value of such work. In fixing said rates, within the limits aforesaid, at which water shall be so furnished as to each of such persons, companies, associations, and corporations, each of said board of supervisors may likewise take into estimation any and all other facts, circumstances, and condi-
109 tions pertinent thereto, to the end and purpose that said rates shall be equal, reasonable, and just, both to such persons, companies, associations, and corporations, and to said inhabitants. The said rates, when so fixed by such board, shall be binding and conclusive for not less than one year next after their establishment, and until established anew or abrogated by such board of supervisors, as hereinafter provided. And until such rates shall be so established, or after they shall have been abrogated by such board of supervisors, as in this act provided, the actual rates established and collected by each of the persons, companies, associations, and corporations now furnishing or that shall hereafter furnish, appropriated waters for sale, rental, or distribution to the inhabitants of any of the counties of this State, shall be deemed and accepted as the legally established rates thereof."

By section 6 of the act it is provided that at any time after the rates have been once established by the board of supervisors the same may be established anew or abrogated in whole or in part by such board to take effect one year next after such first establishment, upon either the written petition of 25 of the inhabitants who are tax-payers of the county, or "upon the written petition of any persons, companies, associations, or corporations, the rates and compensation of whose appropriated waters have already been fixed and regulated and are still subject to such regulation by any of the boards of supervisors of this State as in this act provided."

After the views of this court in respect to a money exaction for the so-called "water right" and in respect to the alleged estoppel and in respect to the construction of the provisions of the act of the legislature of California of March 12, 1885, had been expressed
110 in the case of Lanning *v.* Osborne, upon exceptions filed by the defendants to the bill in that case, and before that suit

had been finally disposed of either by the supreme court or by this court, certain of the consumers of water under the company's system, and who were defendants in the suit, procured 25 inhabitants of the county of San Diego, who were not consumers of water from the company's system at all, to institute proceedings before the board of supervisors of that county, under and by virtue of the provisions of the act of California of March 12, 1885, to have the rates to be charged by the company established by the board. This was after the present complainant had succeeded to the rights of the Kansas corporation of the same name. To the proceedings thus initiated before the board of supervisors, the consumers, by their attorneys, who were also consumers of water under the company's system, appeared and filed the following document:

"To the honorable board of supervisors of the county of San Diego

"The present consumers of water for irrigation from the system of the San Diego Land and Town Compony, who live outside of the city of National City, hereby allege and claim that each of them respectively has by purchase or otherwise become the owner of a right to the flow and use of so much of the water appropriated by said company for sale, rental and distribution as is necessary to irrigate his or her respective tract of land under said company's system; that to each of said tracts of land the said company or its predecessor in title did, by its consent and voluntary act, annex the easement of the right to the flow and use of water from said system of irrigation of such tract in freehold; that each such consumer has fully paid or otherwise satisfied said company and its pre-
111 decessor for the full price and value of such water right; and that none of said consumers, nor any of the lands of such consumers are liable to pay to said company any water rate other than their due proportion of the annual reasonable expenses of such company to cover the cost of repairs, management and operation of the works used and useful to the appropriation and furnishing of such water to such land.

"And each and all said consumers protest against the fixing of any rates as to them to provide or create net annual receipts and profits upon the value of said company's water system so used and useful for the appropriation and furnishing of such water to their respective lands.

"HAINES & WARD AND
"C. H. RIPPEY,
"*Attorneys for the Consumers.*"

Much evidence was given before the board of supervisors by and on behalf of the respective parties to the proceeding. Among other things, it was shown on behalf of the company what the original cost of the plant was; the percentage of depreciation; the annual expenses of repairs, management and operation, and the cost of extensions, and enlargements, and other permanent improvements of the works and on the part of the protestants it was, among other things, shown that the entire plant was for the year in question as-

sessed upon the county assessment-roll of the county at $155,000, and further that the present complainant acquired the entire property of the Kansas corporation, including its lands, for $889,163.33. The rate fixed by the board of supervisors for the water for irrigation purposes was $3.50 per acre per annum, which rate the com-
plainant seeks by the present bill to have annulled on the
112 ground that it is so low as to amount to the taking of its property without just compensation, contrary to the provisions of the Constitution of the United States. To the bill the defendants filed exceptions and also demurrers, both of which were overruled by the court, with leave to the defendants to answer. The 25 defendants who initiated by petition the proceedings before the supervisors resulting in the fixing of the rates sought by the bill to be annulled, did not answer the bill and default was entered against them soon after the time for their appearance expired. The members of the board of supervisors alone made answer to the bill, putting in issue many of its material averments and alleging, among other things, that the complainant's plant was not worth to exceed $250,000. On the trial of the issues thereby made in this case evidence was also given on behalf of the complainant as to the cost of the water system, the percentage of the depreciation of the plant, the annual expenses for repairs, management and operation, and as to the cost of the permanent improvements thereto; and evidence was also given on behalf of the defendants tending to show that the plant cost very much more than it was fairly worth, and that it could be replaced for less than two-thirds of its original cost. At the conclusion of the evidence given before the board of supervisors the complainant filed with the board the following request:

"That in the fixing and determination of the rates to be charged by this company for water to be furnished to its consumers the board find and determine the following matters, to wit:

"1. The value of the dam, reservoir, water rights and distributing system, and all other property actually needed by said com-
113 pany and useful to the appropriation and furnishing of such water.

"2. The annual reasonable expenses of the company, including the cost of repairs, management and operating its works.

"3. The cost of any extensions, enlargements or other permanent improvements of the water works of the company since the original construction of its plant.

"4. The amount of depreciation of the plant of the company by natural wear from use and the action of the elements, either by way of percentage per annum of such deterioration or the gross sum thereof for the years since the company commenced to furnish water.

"5. The rates for irrigation necessary to be charged, together with the domestic rates, in order to return to the company net annual receipts and profits of not less than six per cent. upon the value of its property as found by the board."

The board refused to make or file the findings so requested, but it appears from the testimony of the only one of its members who

was examined as a witness on this hearing that the supervisors prepared and signed the following paper, a copy of which each of them retained, but which was never placed among its records:

"*Findings.*

"Office of the Board of Supervisors of the County of San Diego, State of California.

"In the Matter of Fixing Water Rates for the San Diego Land and Town Co. of Maine.

"This matter coming on regularly to be heard and the evidence all being presented, the board after a careful consideration of all the testimony regarding the value of the water plant of the San Diego Land and Town Company of Maine, including the amount at
114 which the entire property had recently been sold, to wit: $889,163.33, and the proportionate value of the said plant to the whole of the property sold and the amount at which said plant has been carried upon the assessment-rolls of the county for the past eight years, to wit: $155,000.00. We estimate and determine the value of said plant to be $350,000.00.

"We further fix the rate of interest at 6 per cent. per annum making the sum of $21,000.00 per annum.

"We further estimate and determine the amount of the expense necessary to maintain and operate said plant to be $13,442.00. Making the sum total of revenue to be raised for the company $34,442.00 per annum.

"We further estimate and determine the capacity of the reservoir to be 3,000,000,000 gallons.

"We further estimate and determine that the amount of water used by National City to be about 600,000,000 gallons per annum.

"We further estimate the amount of water available for outside irrigation purposes to be 2,400,000,000 gallons, a sufficient quantity to irrigate 6080 acres of land allowing 350,000 gallons per acre and we fix an annual rate of $3.50 per acre, making a sum total of $21,280.00 per annum.

"We further find that the annual sum the company receives from the sale of water to National City is $13,162.00, which sum taken together with the above-estimated amount of outside water rental ($21,280.00) makes a total of $34,442.00, the whole amount required to produce the interest and operating expenses as above set forth."

It appears from the evidence that at the time the ordinance in question was adopted, which was in the month of October, the water supply of the complainant, by reason of the drought that
115 had then for a long time prevailed in southern California, was only about one-third of the normal supply; and, the drought having unfortunately continued, that the supply rapidly decreased until, within about a year, it was entirely exhausted.

Three points are made on behalf of the complainant: First, that the petitioners who initiated the proceedings before the board

of supervisors are, in contemplation of law, the only parties in interest, and therefore that upon the entry of the default against them for failure to answer the bill herein the complainant became entitled to a decree setting aside the rates and declaring the ordinance fixing them void; second, that the ordinance should be declared invalid because procured in such a way as to amount to a deception upon the board of supervisors, in that it was procured to be prosecuted by interested parties in the name of parties having no interest in the fixing of the rates; and, third, that the rates established by the ordinance complained of are so unreasonably low as to amount to the taking of the complainant's property without just compensation, contrary to the provisions of the Constitution of the United States.

The answer to the first point is that each and every person to whom the rates fixed apply—in other words, the public—is interested in the question, and the representative of this public in the matter is the board of supervisors, each member of which was by the complainant made a party defendant to the suit, and all of whom appeared to the bill and interposed a defense in behalf of all parties interested. This practice has been uniformly sanctioned and held to be proper. Chicago R'y Co. *v.* Minnesota, 134 U. S. 418; Riggin *v.* Farmers' Loan & Trust Co., 154 U. S. 362; Georgia Banking Co. *v.* Smith, 128 U. S. 174; Stone *v.* New Orleans & N. E. R'y Co., 116 U. S. 353; St. Louis & S. F. R. Co. *v.* Gill, 156 U. S. 649; San
116 Diego Land & Town Co. *v.* National City, 74 Fed. 79; *id.*, 174 U. S. 739; Reed *v.* Chicago etc. R'y Co., 94 U. S. 164.

In respect to the second point, it is, I think, sufficient to say that it appears from the evidence that the purpose of the consumers of the water under the company's system, all of whom were defendants to the suit of Lanning *v.* Osborne, *supra*, in procuring outside taxpayers to petition the board of supervisors for the establishment of rates, was to avoid any and all acquiescence in the power of the board to establish such rates, and to continue their contention that the company was estopped from changing the irrigation rate of $3.50 per acre per annum, without subjecting themselves to a charge of inconsistency of position; and at the same time to secure a lower rate than that fixed by the receiver of the company's property. The act of the legislature of California, approved March 12, 1885, authorizes any 25 inhabitants who are tax-payers of the county to initiate proceedings and does not limit the right to those who are actual consumers of the water the rates of which they may seek to have fixed by the board of supervisors. Under these circumstances I am of opinion that the point suggested is not well taken.

The last and principal point in the case is, like all questions of the kind, perplexing and embarrassing; for, while I would not hesitate to annul any ordinance that fixes rates which, in effect, clearly operate to take one's property without just compensation, contrary to the provisions of the Constitution of the United States, the court must not lose sight of the fact that the question is primarily one for the determination of the legislature or of some public agency designated by it—in the present instance, the board of supervisors of San

Diego county. The rule by which the courts must be
117 governed in such cases has been many times declared, and was stated by the Supreme Court in the case of The San Diego Land and Town Co. *v.* National City, 174 U. S. 753, in these words:

"That it was competent for the State of California to declare that the use of all water appropriated for sale, rental or distribution should be a public use and subject to public regulation and control, and that it could confer upon the proper municipal corporation power to fix the rates of compensation to be collected for the use of water supplied to any city, county or town or to the inhabitants thereof, is not disputed, and is not, as we think, to be doubted. It is equally clear that this power could not be exercised arbitrarily and without reference to what was just and reasonable as between the public and those who appropriated water and supplied it for general use; for the State cannot by any of its agencies, legislative, executive or judicial, withhold from the owners of private property just compensation for its use. That would be a deprivation of property without due process of law. Chicago, Burlington &c. Railroad *v.* Chicago, 166 U. S. 226; Smyth *v.* Ames, 169 U. S. 466, 524. But it should also be remembered that the judiciary ought not to interfere with the collection of rates established under legislative sanction unless they are so plainly and palpably unreasonable as to make their enforcement equivalent to the taking of property for public use without such compensation as under all the circumstances is just both to the owner and to the public; that is, judicial interference should never occur unless the case presents, clearly and beyond all doubt, such a flagrant attack upon the rights of property under the guise of regulations as to compel the court to say that the rates prescribed will necessarily have the effect to deny just compensation for private property taken for the public use."

118 What the company is entitled to demand in order that it may have just compensation is, as said in the case last cited, "a fair return upon the reasonable value of the property at the time it is being used for the public." And unless the act of the legislature of California of March 12, 1885, makes the cost of the plant here in question the test of its value, that value must be determined upon a consideration of all of the facts and circumstances of the case. In that determination, said this court in San Diego Land and Town Co. *v.* City of National City, 74 Fed. 83, "many considerations may enter; among them, the amount of money actually invested. But that is by no means, of itself, controlling, even where the property was at the time fairly worth what it cost. If it has since enhanced in value, those who invested their money in it, like others who invest their money in any other kind of property, are justly entitled to the benefit of the increased value. If, on the other hand, the property has decreased in value, it is but right that those who invested their money in it and took the chances of an increase in value, should bear the burden of the decrease. In my judgment, it is the actual value of the property at the time the rates are to be fixed that should

form the basis upon which to compute just rates; having, at the same time, due regard to the rights of the public and to the cost of maintenance of the plant, and its depreciation by reason of wear and tear." I adhere to those views and think them confirmed by the decisions of the supreme court above cited. The rates, as has been seen, are to be just at the time they are fixed; and what are just rates depends, as has been said, in large measure, upon the reasonable value of the property used in supplying the water to the public. The actual value of such property obviously depends
119 upon a variety of considerations, among them, the actual and prospective number of consumers, and is no more unchangeable than the value of any other kind of property; and that fact seems to have been recognized by the legislature of California in enacting the law of March 12, 1885, where provision is made, as has been seen, for the abrogation of the rates once fixed, after the expiration of 12 months, and the establishment of new rates, upon either the written petition of 25 of the inhabitants who are tax-payers of the county or upon that of the company or person furnishing the water. The evidence before the court shows that at the time the rates in question were fixed the company's supply of water had, by reason of the then prevailing drought in southern California, very largely decreased, and soon thereafter entirely ceased; so that, while the cost of the system undoubtedly remained the same, it cannot, I think, be justly held that its reasonable value, for the time being at least, was not largely decreased; for, however much a water plant may have cost, its chief value disappears with the disappearance of the water for the transmission and sale of which it was constructed. Upon the return of the normal rainfall, the value of this property, like that of many other properties which have been injuriously affected in value by the unusual and severe droughts that have recently prevailed in this section of the country, will undoubtedly largely increase, which conditions should, and doubtless will, have due consideration when water rates are again required to be fixed. While in such matters, as in some others, absolute justice is, perhaps, unattainable, certainly as near an approach to it ought to be made as is practicable. This can only be done by all parties in interest approaching the problem in a spirit of fairness. It would seem from the testimony of Mr. Cherry, a member of the
120 board that fixed the rates in question, that the board fixed its valuation of the company's plant at $350,000 largely upon a consideration of its assessed value of $155,000 for the purposes of taxation and upon what the board thought was a fair proportion to be attributed to the water plant of the $889,163.33 for which the complainant acquired the entire property of the Kansas corporation; that it estimated and allowed for the maintenance and operation of the plant $13,442 a year and that it estimated that the company's supply of water would irrigate 6,080 acres of land outside of National City and found that it would receive $13,162 annually from the sale of water within that city. The board accordingly fixed $3.50 per acre as the annual rate to be paid for water for irrigation outside of National City, which, together with the amount received by the com-

pany for water furnished within that city, would meet the cost of maintenance and operation and pay a little more than six per cent. per annum upon a valuation of the plant of $350,000.

It is insisted on the part of the complainant that the board of supervisors made no allowance for the deterioration of the plant, and that the evidence plainly shows that the soil in which the pipes of this company are laid is of such a nature that the pipes rust and otherwise deteriorate much more rapidly than similar pipes in other soils, and require to be relaid in from 10 to 20 years. The evidence undoubtedly so shows, and that fact should be given due consideration in fixing rates and in determining their reasonableness; but it is not just, I think, to charge all of the consequences of that unfortunate state of affairs to the consumers. To some extent, at least, it goes to lessen the value of the plant itself; and this fact must be given consideration by the court in deciding upon the effect
121 of the action of the board of supervisors; for it must be remembered that it is the result of its action as embodied in the ordinance that is the subject for the determination of the court—not the processes by which it reached its conclusion. In view of all of the facts and circumstances of the case as disclosed by the evidence, and especially in view of the small quantity of water available for use and actually furnished for irrigation outside of National City at the time the rates in question were fixed, which amount constantly decreased to the point of exhaustion, I do not think the court would be justified in holding it to be clear that the rates fixed by the board of supervisors will necessarily have the effect of depriving the complainant of its property without just compensation, unless it be, as is contended on the part of the complainant in another and similar suit pending in this court and now under submission, entitled E. H. Spoor, receiver, *v.* Board of Supervisors of Riverside County, *et al.*, that the statute of California above cited, and by virtue of which the proceedings before the supervisors were had, itself makes the cost of the plant the test of its value. That question remains to be considered.

It is quite evident, as urged by counsel in the Riverside case, from the provision of the statute in respect to interest, that the purpose of the legislature was to encourage the investment of capital in such water systems and thereby promote the development and settlement of the State. That provision is that "said boards of supervisors in fixing such rates shall, as near as may be, so adjust them that the net annual receipts and profits thereof to the said persons, companies, associations and corporations so furnishing such water to such inhabitants shall not be less than six per cent. nor more than eighteen per cent.," not however, as said by counsel, "upon the
122 cost of the system," but "upon the said value of the canals, ditches, flumes, chutes, and all other property actually used and useful to the appropriation and furnishing of such water" etc.; that is to say, the value of the canals, ditches, flumes, water chutes, and all other property actually used and useful to the appropriation and furnishing of such water belonging to and possessed by the company or person furnishing it that the board of supervisors is, by

the fourth section of the act, required to "estimate as near as may be;" being given power, to that end, as well as for the purpose of estimating the "annual reasonable expenses, including the cost of repairs, management and operating such works," to require the attendance of persons to give evidence, as also the production of papers, books and accounts. If the legislature had intended to make the cost of the plant the test of its value, it would have been the simplest sort of thing to have said so. But this it did not do. It is true that, in section 5 of the act, it does seem to require the board of supervisors, acting in pursuance of its provisions, to accept the cost of "any extensions, enlargements or other permanent improvements" to the system as the value of such improvements; for the provision requiring the board to so adjust the rates as that the net annual receipts and profits shall be not less than six nor more than eighteen per cent. of the value of the property is followed by this declaration: "But in estimating such net receipts and profits the cost of any extensions, enlargements or other permanent improvements of such water rights or water works shall not be included as part of the said expenses of management, repairs and operating of such works, but when accomplished may and shall be included in the present cost and cash value of such work." It is said that the words
123 "present cost" here used indicate that it was intended by the legislature to make the cost of the entire plant the test of its value. But, in view of the other provisions of the act above referred to, and in view of the fact that it would have been a very simple matter for the legislature to have said that the cost of the plant should be taken as its value, if it had so intended, I think the court would not be justified in giving to the words "present cost" used in the clause quoted that effect. Those words, in the connection in which they are used, seem to be out of place and their meaning is very indefinite and uncertain. As already observed, the clause last quoted does seem to require the cost "of any extensions, enlargements or other permanent improvements" to the plant to be accepted as *their* value. But such permanent improvements in the case at bar constitute but a small part of the complainant's plant.

Looking at the whole case, as the court must, I am unable to say that the rates prescribed by the board of supervisors here complained of will necessarily have the effect to deny just compensation to the complainant for the use of its property. Accordingly there must be a decree dismissing the bill at the complainant's cost.

It is so ordered.

ROSS,
Circuit Judge.

E. H. SPOOR, Receiver,
vs.
BOARD OF SUPERVISORS OF RIVERSIDE COUNTY ET AL.

124 This is a similar suit to that just disposed of, and the views expressed in the foregoing opinion, applied to the evidence given in this cause, require a similar judgment herein.

Ordered accordingly.

ROSS,
Circuit Judge.

(Endorsed:) No. 768 U. S. circuit court ninth circuit, southern district of California. San Diego Land and Town Company, a corporation, *vs.* James A. Jasper, *et al.*, *and* E. H. Spoor, receiver *vs.* Board of Supervisors of Riverside County, *et al.* No. 735 Opinion of the court. Filed Aug. 26 1901 Wm. M. Van Dyke clerk Chas. N. Williams deputy.

125 SAN DIEGO LAND & TOWN CO., Comp., vs. JAS. A. JASPER ET AL., Def'ts.

126 *Index.*

	Direct.		*Cross.*
Stipulations in regard to stenographer	..	2	..
Howard M. Cherry	2	..	18
Findings of board of supervisors	..	7	..
Computations produced by witness Cherry	..	10	..
Alfred Haines	25	..	..
Victor E. Shaw	44	..	48
Stipulation as to preparation of petition and as to fee &c.	..	48	..
H. N. Savage	48	..	58
Notice to water consumers	..	60	..
John E. Boal	66	..	67
Card as to collection of water rent	..	75	..
H. N. Savage, recalled	79	..	81
A. Haines, recalled	..	78*a*	..
Tabulated statement of the Sweetwater dam, pipe lines, etc.	..	87*b*	..
Tabulated statement of water rents, etc	..	87*d*	..
Tabulated statement of the Sweetwater dam, pipe lines, etc. (later statement)	..	87*f*	..
Tab. statement water rents (later statement)	..	87*g*	..
Thomas R. Williams	88	..	..
Elisha M. Gavin	91	..	..
William F. Stearns	94	..	97
George Daschbach	98	..	..
William F. Stearns recalled	..	99	..
John E. Boal recalled	100	..	..
127 Apportionment agreement	..	..	101
C. A. Wittemore	104	..	105
John Crellin	106	..	..
John E. Boal recalled	108	..	..
Frank Palmer	109	..	110
S. W. Haines	111	..	..
John E. Boal recalled	115	..	115
Agreement of April 6 1899	..	118	..
Charles D. Lanning	122	..	133
Circular to shareholders	..	127	..
L. F. Doolittle	145	..	148
John E. Boal recalled	160	..	160
H. N. Savage recalled	164	..	170
A. H. Koebig	179	..	202
Stipulation as to statements made by H. N. Savage to witness Koebig	..	230	..
Stipulation as to number of gallons allowed (in statement) to the acre	..	231	..
Stipulation as to estimate of $180,000	..	239	..
John E. Boal recalled	240	..	..
A. H. Koebig recalled	..	..	241
Charles D. Lanning recalled	..	..	250
Fred Copeland	255	..	257
H. N. Savage recalled	258	..	264

S. A. Dale ..... 267 .. 268
George Daschbach recalled... ..... 272 .. 272
A. C. Crockett..... 273 .. 273
Stipulation as to exhibits placed in evidence before the board of supervisors .... 274 ..
Decree in S. D. L. & T. Co. of Maine vs. Osborne..... .. 275 ..
Henry Gulick ..... 277 .. ..
John E. Boal recalled. 281

128 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY OF MAINE, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

Report of Special Examiner.

Be it remembered, that on the 13th day of December, 1898, and on the several days thereafter to which the examination was regularly adjourned, as hereinafter set forth, and at the times mutually agreed upon by the parties in said cause, at the office of Messrs. Works & Works, in the Keating block, in the city of San Diego, State of California, in said district, before me, George J. Leovy, who was by consent of counsel for complainant and defendants appointed special examiner by said circuit court to take the testimony herein, and who duly qualified by taking oath before the clerk of said court as such special examiner, personally appeared the several witnesses whose names are hereinafter set forth, who were produced and examined on behalf of the respective parties to the above-entitled cause.

Messrs. Works & Works appeared as solicitors for the complainant, and A. H. Sweet, Esq., represented by A. H. Haines, of Haines & Ward, appeared as solicitors for the defendants.

The following is a correct report of the proceedings:

129 The special examiner herein, George J. Leovy, Esq., having appointed Frederick Meakin stenographer to take down and transcribe the testimony taken before me,

It is hereby stipulated, that the appointment of said stenographer is hereby approved and affirmed by the parties to this action, and the taking of any oath by said stenographer is hereby waived by said parties.

And it is further stipulated, that the evidence about to be taken may be taken down in shorthand by Frederick Meakin, official stenographer of the superior court of the county of San Diego, State of California, and that the same may be written out by him in longhand, and when certified by him as correct may be filed as such testimony, and that the signing of the evidence by the witnesses, respectively, is hereby waived.

HOWARD M. CHERRY, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?
A. Howard M. Cherry.
Q. Where do you reside?
A. In San Diego.
Q. What is your occupation?
A. Supervisor of the first district of San Diego county.
Q. Have you any other occupation?
A. I am in the insurance business.
Q. You are one of the defendants in this action, I believe?
A. I so understand it—yes sir.
Q. You were one of the members of the board of supervisors of the county of San Diego at the time of the adoption of the ordinance that is in controversy in this suit?
130 A. I was.
Q. Did you take part in the deliberations of the board of supervisors in the passage and adoption of that ordinance?
A. I did.
Q. Were you present during the entire hearing of the matter before the board, the taking of the testimony and the arguments?
A. I was.
Q. How long was it after the matter was finally submitted to the board until the board took final action?
A. It was at the same meeting of the board.
Q. Do you mean at the same session or the same day?
A. The same session of the board: I don't just remember whether it was the same day or the next day.
Q. What did you fix in your deliberations as the value of the plant?
A. I could not give it to you offhand now; I have a statement here, if I am allowed to refer to it.
Q. Any way that you can refresh your recollection and state the amount. (Witness takes out paper.)
Mr. WORKS: Let me see what you have that you are referring to. (Paper handed to complainant's counsel.)
Mr. HAINES: Allow me to see it also. (Paper handed to defendants' counsel.)
Q. Who made up this statement that you now refer to?
A. Who made the copy?
Q. No sir. Who made the statement itself?
A. The board.
Q. Which member of the board?
A. We were in session, and we figured this matter over, and I think I done part of the figuring, and I think Mr. Jasper done part, and other members.
Q. If you did any part of the figuring, how did you arrive at the value of $350,000? What was the basis of your figuring?

131 Mr. HAINES: I suggest that we first learn what the figures were.

Mr. WORKS: I refer to the $350,000.

Mr. HAINES: At this stage we object against any examination into the proceedings of the board of supervisors as being immaterial, irrelevant, and incompetent, inasmuch as this is not an appellate proceeding to review the action of the board of supervisors for error, but is a proceeding *de novo* upon independent testimony, to ascertain therefrom whether the conclusion arrived at by the board in its ordinance is reasonable and just.

Q. (Read.)

A. Why, we took the basis that the whole property had been sold at, and proportioned the valuation of the water plant.

Q. Then your valuation was fixed wholly upon the price at which the property was sold?

A. Yes sir.

Q. How did you make that apportionment and arrive at the value of the water plant where it was all sold in lump?

A. Well, I can't recall the figures just now. We had them. I think I have a copy of the figures somewhere myself. I have not them with me.

Q. Can you get them, Mr. Cherry?

A. Yes sir; I think I can.

Q. I wish you would.

A. I think I have them in my desk.

Q. I wish you would do that. It may refresh your recollection, and we may be able to get at the exact manner in which you arrived at your conclusion. That is what I want to get at, if we can, if you have the figures.

A. I am not positive, but I think I have.

Q. Was this paper which you have handed me filed, do you know, as a part of the records in the case?

132 A. I rather think not—no sir.

Q. Why not?

A. Well, we didn't consider that it was necessary to file them.

Q. You remember that the application was made requesting the board to find upon these various things, do you not?

A. Yes sir.

Q. But you thought it was not necessary to comply with that request?

A. We were instructed it was not necessary.

Q. Whom were you instructed by that it was not necessary?

A. I don't remember who gave the instructions, but we so understood it; I so understood it.

Q. I wish you would remember, if you can, who it was told you it was unnecessary for you to make those findings.

Mr. HAINES: It was Judge Works himself, when he made the proposition, was it not?

WITNESS: I am not sure but what he made that remark, but if I mistake not, I think it was one of the counsel. I think Mr. Shaw said it was not necessary.

Q. Do you remember that you based it upon Mr. Shaw's conclusion that it was not necessary to do that?

A. I don't; no sir.

Q. Did you take any advice from the district attorney on the subject?

A. I think we did—yes sir.

Q. Did he advise you that it was unnecessary?

A. I think so.

Q. Are you sure of that?

A. No sir; I am not positive, but I rather think so.

Q. Why did you say a moment ago it was because of what Mr. Shaw said?

A. I say I think Mr. Shaw was one of the attorneys that
133 said it was not necessary. I also think Mr. Sweet advised us it was not necessary.

Q. Are you quite sure of that?

A. Yes sir.

Q. Why did you say a moment ago you were not sure?

A. I am not positive in regard to it; I would not swear to it positively, but I am rather sure of it.

Q. Then you acted upon the theory, did you, that it was not necessary to make any findings in response to that request?

A. Yes sir.

Q. And you did not make any findings? This paper that you hand me now is a mere memorandum that was made by somebody? You think you did a part of the figuring. Was that done at the time you had it under consideration?

A. Yes sir. Those were the findings in the case, but we didn't think it was necessary to spread them on the minutes, or to furnish you with a copy of the findings.

Q. These minutes were simply kept by the board, these findings, as you call them?

A. Yes sir.

Q. Did you furnish Mr. Shaw a copy of them?

A. No sir.

Q. Did you furnish anybody a copy of them?

A. Not that I know of outside of the five supervisors?

Q. You each one of you took a copy of them?

A. Yes sir.

Q. When was the copy made up?

A. At the time the conclusion was reached.

Q. Was this copy you hand me now, a typewritten copy, made before you determined the matter or afterwards?

A. It was a copy of the findings, and it was made right
134 at that time. Whether it was made before, the day before, or the day after, I don't know.

Q. This paper which you gave me has no signatures. Were there any findings signed by the members of the board?

A. Yes.

Q. What became of it?

A. I don't know.

Q. Did you have it?
A. No, sir.
Q. You know it was not filed?
A. I don't know that—no sir.
Q. You say this was not filed, and this, you say, was your findings. What became of it then?
A. I don't know.
Q. Where did you see it last?
A. At the board room.
Q. Was it actually signed there by the members of the board,—do you know that?
A. It is my recollection it was—yes.
Q. You haven't it now, have you?
A. No sir.
Q. And don't know where it is?
A. No sir.
Q. Don't know what became of it at the time?
A. No sir.
Q. It was not handed to the clerk that you know of?
A. No sir, I don't know that; it was handed to him; it would naturally be in his possession.
Q. Will you kindly explain why you made up those findings and the exact figures, and then kept it to yourselves?
A. It was nothing more than a memorandum of the findings.
Q. For your own private information?
A. Yes, sir.
135 Q. Was anything said about not filing it there, not letting anybody know what your figures were?
A. I don't remember of anything, only it being said that we would each of us take a copy and preserve it.
Q. Each of you took a copy and preserved it, but you were not to let anybody else have it, were you?
A. I don't remember of anything being said about no one else having it.
Q. You did not furnish to anybody else?
A. No.
Q. Each of you took a copy and carried it off with you?
A. That is what I did with mine.
Q. Do you know that the other members of the board took theirs at the time?
A. Yes sir—my recollection is that all took a copy of it.
Q. Have you ever shown these findings to anybody?
A. No sir.
Q. Always kept them to yourselves?
A. Well, no sir, I don't know that we did.
Q. Did you ever talk to anybody about them?
A. No sir.

Mr. WORKS: I would like to have the figures which you made, before we can complete the examination of Mr. Cherry. Mr. Boal, will you telephone to Mr. Dodge, the clerk of the board, and ask him

whether any findings are on file, made by the board of supervisors in this matter?

Q. This paper which you hand me is a correct copy of the findings that were made at that time, and the figures showing the different matters set forth in the paper, is it?

A. Yes, sir.

Mr. WORKS: We offer this as part of the evidence.

136 Reads document as follows:

"*Findings.*

Office of the Board of Supervisors of the County of San Diego, State of California.

In the Matter of Fixing Water Rates for the San Diego Land and Town Co. of Maine.

This matter coming on regularly to be heard and the evidence all being presented, the board after a careful consideration of all the testimony regarding the value of the water plant of the San Diego Land and Town Company of Maine, including the amount at which the entire property had recently been sold, to wit: $889,163.33, and the proportionate value of the said plant to the whole of the property sold and the amount at which said plant has been carried upon the assessment-rolls of the county for the past eight years, to wit: $155,000.00. We estimate and determine the value of said plant to be $350,000.00.

We further fix the rate of interest at 6% per annum making the sum of $21,000.00 per annum.

We further estimate and determine the amount of the expense necessary to maintain and operate said plant to be $13,442.00. Making the sum total of revenue to be raised for the company $34,442.00 per annum.

We further estimate and determine the capacity of the reservoir to be 3,000,000,000 gallons.

We further estimate and determine that the amount of water used by National City to be about 600,000,000 gallons per annum.

We further estimate the amount of water available for outside irrigation purposes to be 2,400,000,000 gallons, a sufficient
137 quan-ity to irrigate 6,080 acres of land allowing 350,000 gallons per acre and we fix an annual rate of $3.50 per acre, making a sum total of $21,280.00 per annum.

We further find that the annual sum the company receives from the sale of water to National City is $13,162.00, which sum taken together with the above estimated amount of outside water rental ($21,280.00) makes a total of $34,442.00—the whole amount required to produce the interest and operating expenses as above set forth."

Mr. BOAL: I found the clerk, and he said there was nothing ordered filed.

Mr. WORKS: I am afraid I cannot complete the examination of Mr Cherry until he can get me those figures.

WITNESS: I will go and endeavor to rake them up.

Mr. HAINES: You want to do that before cross-examination?

Mr. WORKS: Yes sir; I have not finished the examination yet—until I get those figures.

WITNESS: They are at home, I think.

SPECIAL EXAMINER: The further continuance of taking testimony is now, by consent of the attorneys, adjourned until 9.30 a. m. December 14, 1898, at the same office. The witnesses present will please be present tomorrow, at this office, at half past nine o'clock.

SAN DIEGO, CALIF., *December* 14, 1898—9.30 a. m.

HOWARD M. CHERRY resumes the witness stand.

By Mr. WORKS:

Q. Are you able now to furnish the figures upon which the findings referred to above were based?

A. Yes sir.

Q. I wish you would produce them, please. (Witness produces papers and hands them to complainant's counsel.)

Q. Who made these figures?

A. I did.

138 Q. Did anybody else make any figures?

A. Yes sir. At the time the figures were made we were all together, and we looked them over when we figured.

Q. Is this paper which you hand me a correct statement of the figures upon which your findings were based finally?

A. Yes.

Mr. WORKS: We offer these in evidence.

Mr. HAINES: We object to the introduction of any figures or computations made by any member of the board of supervisors, or by the board as a whole, as immaterial and irrelevant to this cause, in that the question of the reasonableness of the ordinance in question is to be tried *de novo* upon original testimony to be taken in the cause, and that the board of supervisors is not on trial for the question of the reasonableness of the ordinance set forth in the complaint.

Mr. WORKS: I wish them to be copied into the record.

Document reads as follows:

Office of the board of supervisors.

1st district: H. M. Cherry, San Diego.
2d district: C. H. Swallow, San Diego.
3d district: Jas. A. Jasper, Ramona.
4th district: Wm. Justice, Richland.
5th district: John Griffin, San Luis Rey.
Jas. A. Jasper, chairman.
Will H. Holcomb, county clerk.
J. M. Dodge, clerk of board.

SAN DIEGO, CAL., —— —, 189–.

Gen. exp.	3712.14		
Legal "	1491.62		
Water dep't	3426.90		
139 Ins.	8.00		Maintaining & operating.
Office	1532.68		
Taxes	3270.66		
	13442.00		
Int. on water plant $350,000...	21000.		
	34442.00		
Money received from sale of water to National City.....	13162.00		
	21280.00		Am't to be raised.

Irrigation:

6080 acres @ 3.50 per a.
350

304000
18240

2128000

Q. Now, if I understand this memorandum, Mr. Cherry, you first commenced in your figuring by ascertaining what the expenses were?

A. Yes sir.

Q. Then what did you do next in arriving at your findings?

A. You have them before you, Judge. I don't remember.

Q. I have here next, interest on value of plant $350,000—$21,000?

A. Yes sir.

Q. After arriving at the expenses did you next arrive at the value of the plant?

A. The plant has always been assessed at $155,000, sworn to by the officers of the company as a fair valuation, and we more
140 than doubled it, and put it at $350,000.

Q. Was that the way in which you arrived at the value, by taking that as a basis and then doubling it?

A. We more than doubled it—yes sir.

Q. Did you take that as a basis to begin with, is what I am trying to get at, in arriving at the value?

A. With the assessed valuation, and the price that the plant was sold at a few months before that.

Q. You took both of those, did you?

A. Yes sir; we thought that was a fair valuation.

Q. Was there any way by which you could ascertain, or did you ascertain what proportion of the purchase price of the property covered the plant, the water plant?

A. We endeavored to, in the evidence, to get all the information we could; and we acted accordingly.

Q. Do you remember how you arrived at that, how you got that figure from the evidence as to the purchase price of the property, how you made your apportionment?

A. I do not now—no sir.

Q. Are you sure that you undertook to do anything of that sort, to apportion the purchase price and arrive at the actual amount paid for the distributing plant, or did you take the two items of the whole purchase price and the assessment for taxation, and then make a sort of a lump estimate of its value?

A. We done so much figuring I don't remember now, Judge; I can't remember more than a year back in regard to figures made. All I know is, we done everything just as honestly as we could in the matter and tried to be fair in the matter.

Q. Nobody is questioning your fairness. I am trying to get at the manner in which it was done, that we may determine whether it was reasonable or not. Whether it was honestly done or
141 not is not material. You had before you, at the time you fixed the general expenses of the company, the exhibits showing the actual expenses, did you not?

A. Yes sir; we had a tabulated statement there.

Mr. HAINES: The exhibits are down there at the office. I have a copy I guess.

Q. You found, as I understand, by comparison of your figures and those of the exhibits referred to, the operating expenses substantially as they were shown by those exhibits?

A. Yes.

Q. With the exception, I believe, of the office expenses, which you seem to have reduced, according to the figures, $467.32 You can compare these, if you want to be right about it. That is the way we figure it.

A. Something like that amount was reduced—yes sir.

Q. A comparison of the figures will show just what reduction was made. You made no estimate or finding upon the depreciation of the plant?

A. I believe not.

Q. Why not?

A. Well, we had nothing before us, to my satisfaction, that we could figure on.

Q. You did not figure, whatever the evidence might be, you did not figure, or make any allowance, or take into account, any depreciation of the plant?

A. No sir.

Q. And in arriving at the amount that could be realized at $3.50 per acre, you made your estimate upon the full acreage of land that could be supplied by the system, and not what was actually being supplied, at the time of the hearing, did you not?

A. Yes sir.

142 Q. Do you know upon what theory you made your estimate upon that basis?

A. Well, the evidence produced showed that that much land could be irrigated.

Q. Then you made these findings and adopted your ordinance knowing that from the land actually being irrigated at the time your ordinance was passed the company could not realize six per cent. upon the value of the plant over and above the operating expenses?

A. In a measure that would be true, in a measure—yes, sir.

Q. Is it not wholly true, in order to make the six per cent. over and above the operating expenses, according to your findings, they would have to be supplying the water to the full number of acres that could be served by the system, as I understand your findings?

A. I don't remember whether that is the full acreage or not.

Q. I find this in your findings: "We further estimate the amount of water available for outside irrigation purposes to be 2,400,000,000 gallons, a sufficient quantity to irrigate 6080 acres of land allowing 350,000 gallons per acre and we fix an annual rate of $3.50 per acre, making a total sum of $21,280.00 per annum."—And I find by your figures that have been submitted here you have: "Irrigation—6080 acres at $3.50 per acre, $21,280." Which is the basis of your finding, as follows: "We further find that the annual sum the company receives from the sale of water to National City is $13,162.00, which sum taken together with the above estimated amount of outside water rental ($21,280.00) makes a total of $34,442.00 the whole amount required to produce the interest and operating expenses as above set forth." Now, taking these findings and the figures to which I have referred, is it not evident that you based your calculation upon the total number of acres that could be supplied,

143 and not the number of acres that were actually being supplied with water?

A. It is not the number being supplied, but whether it is the total number of acres I don't remember.

Q. You found that to be the total number that could be supplied, did you not? I see in your findings you give the total capacity of the reservoir at 3,000,000,000 gallons, and then you estimate the amount that is necessary to supply National City at 600,000,000 gallons, leaving a balance of 2,400,000,000 which you find is a sufficient quantity to irrigate 6080 acres. Now that is the finding on your part, is it not?

A. Yes, sir.

Q. That the capacity of the reservoir, over and above what was being supplied in National City was 6080 acres?

A. Yes, sir.

Q. And your whole calculation was made upon the basis of its being able to supply that number of acres?

A. That number of acres—yes, sir.

Q. Did you take into consideration at all the question as to any of the consumers having purchased water rights from the company?

A. I don't recollect whether we did or not.

Q. Did you consider at all the question of the protest that was filed by the consumers of water under the system against your fixing rates above $3.50 an acre?

A. How is that?

Q. (Read.)

Mr. HAINES: That is objected to, because the question assumes that to be a fact which is not a fact, inasmuch as no protest was filed claiming that the board was limited to $3.50 per acre.

144 WITNESS: I don't recollect, but I rather think not.

Q. Did you, in arriving at your conclusion as to the full value of the plant take into consideration the proof that was made as to the actual cost of the plant, that is, not the cost as shown by the purchase of the property, but the original cost?

A. We did not figure on the original cost in arriving at those findings; we took as a basis the price the plant was sold at, at the late sale.

Q. Now if that was the basis of your finding, why was it you inserted in your findings the fact that you took into consideration the assessed valuation of the property? You must have taken one or the other of those as your basis?

Mr. HAINES: We object to that, on the ground that it assumes that the board could not take into consideration all the evidence before them, and did not, and that they must have taken one or the other, when in fact the law is that they can consider all the evidence before them, and make a finding upon all of them.

Q. (Read.)

A. Not necessarily. It would be a pretty hard thing for the board to determine. As I say, we took in connection with it the assessed valuation, and we thought we were liberal in doubling it. It has been assessed for years at the same price, if my memory serves me right.

Q. You have stated I believe twice in your testimony that you took the purchase price of the property as a basis for fixing your rates. You have said once I believe that you took also the assessed valuation of the property as a basis, and more than doubled it. I should like to know which one of these you took as the actual basis of the value of the property, if either?

A. I stated before that we figured on the sale price and we
145 figured on the assessed valuation.

Q. Now when you figured on the sale price what did you find to be the value of the property by that course of figuring?

A. I don't recollect.

Q. Did you find any value upon that basis?

A. We didn't find any value upon—we made our figures, but what they were I don't recollect.

Q. You have furnished figures here as being the figures you made. They do not include all the figures then?

A. No, sir; they don't include all the figures we made. Those are the figures our findings were based on.

Q. Do you know what became of the figures you made in arriving at these results that are set out in your figuring here?

A. I do not.

Q. And you have no recollection now as to what you ascertained to be the value by your figuring upon the basis of the purchase price of the property?

A. No, sir.

Q. Could you come anywhere near it?

A. I don't recollect it at all, Judge. It has been more than a year ago, and I never taxed my memory with it at all.

Q. Is it not true, as a matter of fact, that the most tangible basis upon which you could fix your valuation, according to your means of arriving at it, was the assessed value?

A. Sir?

Q. (Read.)

A. I don't know.

Q. There was nothing in the evidence before you by which you could determine what the proportionate amount paid for the water-distributing system was in the purchase price of the property, was there?

Mr. HAINES: We object to this question as assuming a state
146 of facts not borne out by the record of the evidence adduced and already stipulated in evidence in this cause, inasmuch as such evidence does show that the comparative valuations made by the corporation to the title of which the present corporation succeeded, of all the property of the San Diego Land and Town Company, including the water system, the National City and Otay railway, the bonds of the National City and Otay railway, and all the lands owned by the corporation, and all the personal property owned by the corporation, and all the lands owned by the corporation in National City, was introduced in evidence, which furnished a basis upon which the comparative valuations of the water system and all of the other property of the San Diego Land and Town Company could be ascertained.

A. Well, like a good bit more of it, I could make a guess.

Q. If you could arrive at the actual value of the plant by the amount paid for it, what necessity was there for calling in the element of the assessed valuation?

A. Well, the assessed valuation, if I remember right, was part of the evidence. I didn't understand we were bound by any certain portion of the evidence.

Q. You say that the assessed valuation was taken as having been sworn to by the officers of the company. Did you understand that the officers of the company swore to the valuation that was contained in the assessment?

A. I so understood it—yes sir.

Q. You acted upon that understanding, did you, in fixing the valuation?

A. Yes sir.

Q. It appears from the record in this case that the district attorney is appearing and defending the action. Has that been done by order of the board of supervisors?

A. Not really by the order; by request.

147 Q. Are you aware of the fact that the petitioners who were before the board asking that these rates be fixed, and who are made defendants to this action, are not appearing or defending it at all?

Mr. HAINES: Objected to, on the ground that this is immaterial and irrelevant, and on the ground, as counsel is advised, that the action against the petitioners was abandoned in this court by the complainant, upon objection made to joining them with the board of supervisors as defendants.

A. I am not.

Q. You are aware of the fact, are you not, that the petitioners and the consumers of water under this system applied to your board to have you employ at the expense of the county special counsel to defend this action?

Mr. HAINES: Objected to as immaterial and irrelevant to any issue here.

A. The request was made.

Q. It was denied by your board, I believe.

A. That is my understanding.

Q. Do you know by what authority or for what reason the board of supervisors have, at the expense of the whole county, undertaken to defend this suit for the benefit of these petitioners and consumers?

Mr. HAINES: Objected to as immaterial and irrelevant.

A. My understanding is that Mr. Sweet was defending the board of supervisors, not the petitioners and consumers, as we are made parties to the cause.

Q. Do you understand that the board of supervisors or the county have any interest in the defense of the action as real parties in interest?

Mr. HAINES: Objected to as asking for a conclusion as to a matter of law of this witness, and as incompetent and immaterial.

148 A. I do not.

Q. Do you know whether the board of supervisors or the county has been advancing the expenses of carrying on this litigation?

Mr. HAINES: Objected to as immaterial and incompetent.

A. They have not advanced any expense to my knowledge.

By Mr. HAINES—Cross-examination:

Q. Mr. Cherry, have you had any consultation with counsel now appearing in respect to your evidence in this case?

A. No sir.

Q. Have you examined or read over the testimony taken before the board of supervisors upon this petition to fix rates since it was submitted to you?

A. No sir.

Q. Your memory then as to all the evidence is—you don't pretend that it is accurate?

A. I do not—no sir.

Q. This case was fully argued by counsel for the company and for the petitioners, was it not, to the board?

A. It was—yes.

Q. And after that argument and after it was submitted, the board considered the evidence, did they?

A. They did.

Q. Did the board consider all of the evidence which had been submitted bearing on the valuation of the plant before arriving at a conclusion?

A. Yes sir; I think they always took it all into consideration. But, as I say, I don't remember now at this time what was.

Q. But do you remember that the board rejected from consideration, in weighing the testimony, any testimony introduced bearing upon the value of the plant? What I want to know is,

149 whether they weighed all the testimony?

A. Yes sir.

Q. Do you recollect whether the company favored you with any testimony bearing upon the value of the plant except this statement which they produced and testified to? (Hands witness paper.)

A. I don't remember whether, outside of this, they did or not.

Mr. HAINES: The statement referred to is the one made an Exhibit No. 1, in the testimony introduced before the board, and is stipulated into evidence in this cause by separate stipulation between counsel.

Q. Did the board act with any partiality to either party before the board, the company or the petitioners?

A. No sir; they didn't intend so to do.

Q. Now in your findings that were agreed upon by the board, as you have testified, before passing the ordinance, you do not take into consideration water rights, do you?

A. No sir.

Q. And you state nothing in your findings about any contract rate between consumers and the company, do you?

A. No sir.

Q. You were inquired of by Judge Works why you did not put on file these findings. I want to ask you whether you were influenced in your action in that behalf by the statement made by Judge Works to your board, as shown on page 511 of the testimony taken before the board, in these words: "I have drawn this request based upon what I think the statute calls upon the board, to determine, with the exception of No. 4 which applies to the depreciation; that I do not think the statute expressly requires the board to determine, but I think it is one of the important considerations here that the board should take into account, what will return to us
150 the rate required by the statute, and therefore I have requested the board to make its findings upon that question. I concede it is not obligated to do so by the terms of the statute."

Mr. WORKS: That only applies to the depreciation, that it is not obligated to, Mr. Haines, does it not?

Q. (Read.)

A. No sir.

Q. Mr. Cherry, if I understand you, the members of the board in consultation agreed finally upon the figures as set forth in this memorandum in pencil which you produced, and which counsel for the complainant asked to have copied into the record, which for convenience we will call Complainant's Exhibit No. 2?

A. Yes sir.

Q. According to this memorandum and the paper which has been copied into the record marked "Findings," you estimated the amount of water available for outside irrigation purposes to be 2,400,000,000 gallons, a sufficient quantity to irrigate 6080 acres of land, allowing 350,000 gallons per acre; and this finding further goes on to say that you fix an annual rate of $3.50 per acre, making the sum total of $21,280 per annum. That was for irrigation alone—would it not be?—outside of National City?

A. Yes sir.

Q. Now, if it should be the fact that 350,000 gallons per acre is an allowance out of which the consumers outside of National City could obtain the water necessary to irrigate their land, and also for their domestic purposes, then it is true, is it not, that you have left out of this consideration the domestic rates which the company is charging outside of National City?

A. Yes sir; that is my understanding.

Q. Now, if according to the evidence before the board it
151 were true that the domestic rates outside of the city yield, under the ordinance as now passed as much as the irrigation rates, then the company is getting far more than you estimated, would it not be?

A. Yes sir.

Q. And if these domestic rates give as much in addition as the irrigation rates the company would be getting, according to your

computation, with the whole system in use, outside of National City, $21,280 more than you allowed them, would they not?

A. At that ratio—yes sir.

Q. I understand you to say that in arriving at this irrigation rate the board did take into consideration the whole capacity of the system?

A. Yes sir.

Q. The board then did not go upon the theory that if there were only one-half of the system in use, the consumers using that one-half would have to pay interest on the whole value of the system?

A. No.

Q. In other words your determination rests upon the idea that the people consuming water pay interest, and ought to pay interest, only on that part of the system which is used and useful for furnishing them with water—is that right?

A. Yes sir.

Q. I wish you would take this paper which I have called Plaintiff's Exhibit 2. (Hands witness paper.) Will you state what the general expenses so called were as allowed by you in your estimates?

A. $3,712.14.

Q. That is for the year, is it?

A. Yes sir.

Q. And what are the legal expenses?

152 A. $1,491.62.

Q. And what were the so-called water-department expenses?

—. $3,426.90.

Q. And the insurance how much?

A. $8.00.

Q. And the office expenses how much?

A. $1,532.68.

Q. Do you recollect some evidence introduced before the board to the effect that some two thousand dollars were charged up in the Exhibit No. 1 submitted by the company to the board of supervisors for office expenses in Boston—do you recollect something of that kind?

A. I recollect of that coming up, I don't know in what exhibit however, or anything of the sort.

Q. And what were allowed by the board for taxes to the company?

A. $3,270.66.

Q. Now I believe these items all, except a small deduction in the matter of office expenses, were precisely what the company demanded, were they?

A. Yes sir.

Q. Do you recollect of being pressed somewhat with the argument on the part of the petitioners before the board, that if six per cent. nett revenue was allowed to the company, there was no foundation for the claim for taxes? Do you know whether that was argued to you?

A. I don't recollect.

Q. Do you recollect upon what theory the board allowed taxes to the company and also a nett revenue of six per cent.?

A. I do not.

Q. You are still a member of the board of supervisors, are you?

153 A. I am.

Q. Has the San Diego Land and Town Company of Maine made any application to the board of supervisors to fix the rates anew for irrigation under its system and other uses?

A. Not to my knowledge.

Q. Now these rates for irrigation and domestic purposes were fixed by your board upon the theory, were they not, that the company would have sufficient water to supply all the irrigation and domestic uses of the people?

A. Yes sir.

Q. Suppose that the board could have foreseen at the time they fixed rates that in a succeeding year after the passage of the ordinance the supply of water for irrigation furnished by the company would be only one-half of the normal supply, and that the supply of water for domestic use would also fail during part of the year, in your judgment would that affect the value of the irrigation system?

A. I rather think it would—yes sir.

Q. Have you seen the Sweetwater dam recently?

A. I have not.

By Mr. WORKS:

Q. I see by the statute under which these rates were fixed it is provided: But in estimating such nett receipts and profits the cost of any extensions, enlargements, or other permanent improvements of such water rights or water works shall not be included as part of said expenses of management, repairs and operating of such works, but when accomplished, may, and shall be, included in the present cost and cash value of such work. And in the request made by the San Diego Land and Town Company for findings by the board is the following: 3. The cost of any extensions, enlargements or other permanent improvements of the water works of the company

154 since the original construction of its plant. Did the board, in arriving at the rates to be fixed, make any finding or determine the cost of putting in pipe line No. 2 by the company?

A. I don't remember.

Q. There appears to be nothing in your findings upon that subject. I suppose those findings were intended to cover all of the matters upon which you based you conclusion, were they not?

A. Yes sir.

Q. If the board made no estimate of finding as to the cost of putting in this additional pipe line, do you know why it was omitted?

A. No sir; I do not.

By Mr. HAINES:

Q. The board learned from the evidence, did it not, that the San

Diego Land and Town Company of Maine, shortly before your investigation, had purchased at judicial sale all the property of the San Diego Land and Town Company, did you not?

A. Yes sir;

Q. At the time of that purchase this pipe line No. 2 had been built, had it not?

A. Yes sir. That is my understanding.

Q. And it was sold as one property, was it not?

A. It was.

Q. And the San Diego Land and Town Company of Maine, when it acquired this property, acquired it all as one water system, didn't it?

A. Yes sir.

Q. And your findings cover the system as it was when the petition by the petitioners for fixing rates was filed, didn't it?

A. Yes sir.

Q. And that is the same situation it was in when this
155 company acquired it, was it not?

A. That is my understanding.

Q. Now could you find any reason why you should segregate any part of that system from any other part and put a valuation on separate parts of it?

A. No sir.

Q. Do you recollect of any testimony before the board that the system, including this so-called pipe line No. 2 was not and had not been for some time used as one system?

A. I don't recall.

156 ALFRED HAINES, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. Where do you reside?

A. I reside at Chula Vista, in the county of San Diego, State of California.

Q. What is your occupation?

A. I am an attorney-at-law.

Q. Have you any other occupation?

A. I own a little real estate and cause it to be cultivated.

Q. Is your real estate that you own under this system of the San Diego Land and Town Company?

A. I have ten acres, on which I live, under that system.

Q. Is that all under cultivation?

A. And two acres and a half in Sweetwater bottom under this system, which is in the city of National City. The ten acres upon which I live is all under cultivation, except as occupied by buildings and the like.

Q. You then are one of the consumers of water under the system?

A. Yes sir.

Q. And have been since the commencement of the case of Lanning against Osborne referred to in the bill in this case?

A. I was one of the earliest irrigators under the system, and have been a consumer of water at all times since.

Q. Were you as such consumer one of the parties defendant to the action above referred to of Lanning against Osborne?

A. I was.

Q. Are you a member of the law firm of Haines and Ward?

157 —. ——.

Q. Are you the same Haines who appeared as one of the attorneys in the case of Lanning against Osborne?

A. I am.

Q. Are you the same Haines that appeared as one of the protestants on the part of the consumers under this system?

A. I am.

Q. At the hearing before the board of supervisors?

A. I am.

Q. A protest appears there that is signed, according to my recollection, by Haines & Ward and C. H. Rippey as attorneys for the protestants. You are one of the attorneys who appeared and signed that protest, are you?

A. Yes sir.

Q. Do you know how it happened that the petition for the fixing of those rates was presented by persons other than the then consumers under the system?

A. Personally I have no objection to answering this. I doubt whether I should answer in view of my professional relations to parties who advised with me respecting the matter, and I conceive that I am bound by professional duty to decline to answer until their permission is obtained.

Q. I am not asking you to disclose any conversation or communication that took place between you and any of your clients, but I ask you as one of the consumers of this system and from your own knowledge with reference to the manner in which the filing of this petition was procured, whether you know why it was that the petition was filed by a person other than the consumers under the system?

A. Speaking for myself personally, and not for any one that advised with me, I say that I did not sign such a petition, because I do not recognize the jurisdictional power of the board of supervisors to vary my contract relations with the San Diego Land and Town Company of Kansas, to whose property the San Diego Land and Town Company of Maine succeeded by judicial purchase

158 and conveyance.

Q. Do you know whether the other defendants to the case of Lanning against Osborne refrained from signing that petition on the same ground?

A. I conceive that this would be asking for a revelation of professional communications to them which I do not feel at liberty to make.

Q. Then you decline to answer it?

A. I decline to answer it solely upon the ground that my knowledge is wholly obtained in professional consultation with them—that my knowledge on the subject is wholly obtained from professional communications with them.

Q. Independently of your action as an attorney in that proceeding or with reference to that matter, were you appointed on any committee to pass or determine upon this question as to the course to be pursued in getting this matter before the board of supervisors?

A. I think not. I acted solely as attorney.

Q. Were you present at any of the committee meetings in which that matter was discussed?

A. I was present as legal advisor.

Q. Who were the members of that committee?

A. I am not certain that I can give all of them.

Q. Give those you remember?

A. The secretary of the committee was Capt. J. H. Fawcett; the chairman of the committee was Capt. Alfred Keene; other members of the committee were Major F. S. Erle, Mr. Ira Howe, Mr. Downs, whose initials I don't remember, a Mr. Allen, and another Mr. Allen, both of Chula Vista. At this moment I can't recall the names of any others.

Q. Do you know who paid the expenses on the part of the petitioners in prosecuting that petition before the board of super-
159 visors?

A. I have no personal knowledge on the subject——

Q. Did you pay any part of it?

A. No, not to my knowledge. My only knowledge on the subject is that I paid my assessments for the expenses of litigation to a fund, and I have no personal knowledge of the disposition made of the fund except an amount of money paid to myself, or to our firm rather, and some that passed through my hands to Mr. Chapman of Los Angeles.

Q. Do you know how or by what means, or by whom, Mr. Victor E. Shaw, who appeared for the petitioners in that case was paid?

A. I have no personal knowledge upon the subject. I have some hearsay knowledge; that is all I know about it.

Q. Do you know whether he was paid out of the fund to which you contributed?

A. I have no personal knowledge upon the subject; I have hearday knowledge upon the subject.

Q. Do you know whether any arrangement was made with these petitioners by which the consumers, or any of them, agreed or obligated themselves, or by which it was understood that the consumers, or any of them, were to bear any of the expenses of carrying on that proceeding on behalf of the petitioners or in their name?

A. I know of no arrangement with the petitioners for paying any expenses. I myself asked one or two petitioners to sign the petition, and I think that I stated to them that they need have no apprehension of being put to expense.

Q. Did you say anything to them about how the expenses would be met if the petitioners were not to pay them?

A. I expected that the water committee that had levied a fund to which I contributed would see that the expenditures incurred for counsel would be paid out of the fund.

160 Q. The committee to which you refer was a committee representing and acting for the consumers, was it not?

A. It was a committee acting for the consumers, the same committee that had charge of the defense in Lanning against Osborne.

Q. It was a committee that represented and acted for the body of the consumers in the litigation, whatever it might be, between the land and town company and the consumers, involving the question of rates?

A. Yes sir, a general committee of that kind.

Q. How did you understand that this committee would see to the payment of these expenses, Mr. Haines, when you requested these petitioners to become such?

A. Speaking for myself personally, and not from any knowledge derived from consultation with clients, I say that I proposed to pay my share of all such expenses as were incurred, or were necessary, to submit the questions connected with the petition made by these *petioners* to the board of supervisors in the way of counsel fees and the like, although I don't remember of any other expenses than counsel fees. And to answer fully, I mean to say that I contemplated personally paying my share of the expenses of the fees of Mr. Shaw and of Mr. Trippett in that matter before the board.

Q. Why was it that in selecting persons to become petitioners or in requesting them to become petitioners, you applied to persons who were not parties to the suit of Lanning against Osborne, and not consumers under the system?

A. Because the petition we took adversely to the company, as consumers, was, that they cannot bind us by any adjudication of the board of supervisors that militates against our contract rights. I, speaking for myself, and not for those for whom I occupy

161 the relation of counsel, did not intend to put myself in any position to ask the board to abrogate existing relations between myself and the company.

Q. Then, if I understand you, you were claiming that the board of supervisors had no jurisdiction to fix the rates as between you and the other consumers you represented and the company, and was refraining from applying to the board for the fixing of such rates for that reason, but you were endeavoring to secure other persons to become such petitioners, and to call upon the board to act where it had no jurisdiction, and to pay your part at least of the expenses of carrying on the proceeding?

A. On the contrary, so far as I was personally concerned, I desired, and my conduct was shaped with that end in view, of getting petitioners who could confer upon the board jurisdiction to fix rates as to all those whose *whose* rights were not already vested under the system. I believed then and believe now that the status as to water rates which existed between the company and those who were actual consumers when that petition was filed before the board cannot be disturbed without their express consent.

Q. Do you know of any consumers under the system that you do not understand to have vested rights to water under the system, according to your theory?

A. According to the theory of myself, and the theory of the San Diego Land and Town Company, especially as represented by Judge Works, I don't know of any who have not vested rights under that system.

Q. Then why do you say you were seeking the adjudication of this question by the board of supervisors, as between the company and persons not having vested rights?

162 A. That is a matter which rests between me and those who consulted with me about that matter, the petitioners, which I decline to answer because I feel that it is a professional communication.

Q. Speaking for yourself individually, if you understood the law to be that all of the consumers, including yourself, had vested rights there that the board of supervisors had no jurisdiction or power to change or disturb, why were you asking outside persons who were not consumers under the system at all to institute and carry on this proceeding at your expense?

A. In view of the conflicting theories on these questions, speaking for myself personally, I considered it desirable and proper that the board should take jurisdiction of the question of rates upon a petition which did not involve on its face any of the existing consumers. While I have my positive theories upon the subject I was not certain what the final outcome of adjudication would be, and I conceived it proper, and do now think it proper, that such an application should have been made to the board of supervisors, and the question investigated and rates fixed. But I may say that whatever the company's theory upon the subject is, they have since that ordinance was passed claimed the same rate from the consumers that they have always claimed, which happens to be the same as the rate fixed by the board of supervisors.

Q. Waiving the question as to the right or propriety of outside persons bringing on a contest of this kind, do you think it was quite consistent that the consumers themselves, while declining to become parties to the controversy, should have it carried on by and at the apparent instance of outside parties, who were not consumers for the purpose of having the matter determined in the interest of the consumers?

163 A. I will say first—which I can do without any breach of professional confidence—that particularly one consumer has land under the system for which he has desired water, and has not had the water, and I think it not inconsistent with a due regard for the rights of myself as a consumer that I should have done all that I could properly do, or could do, in causing people who were not consumers to make application to the board. I do not think that it was inconsistent with my standing as a consumer, or with my rights as a citizen to bring the question to book in that way. I am perfectly satisfied with my conduct in doing all I did personally in getting that petition to be filed, in what I did in seeing that honorable and

responsible counsel represented the petitioners separate from myself and Col. Rippey, who appeared before the board and presented the case of the consumers, which however seems to have received no consideration by the board, for they fixed rates apparently leaving to the law to decide afterwards whether they applied to the consumers or not. My own theory about it is that the board ought to have classified these lands just as the land and town company did, and made no rate for those who had water rights except maintenance rates. Instead of that the board simply fixed rates as though they applied only to those who desired to become consumers.

Q. You have referred to one individual consumer that you think had the right to ask that his rates should be fixed and determined. Do you mean to say that these proceedings were commenced and carried on on that account and for the benefit of that consumer?

A. They were carried on to the extent that he was interested for his benefit.

Q. They were not carried on, were they, and you did not contribute or agree to contribute, for the purpose of settling the question as between this individual consumer and the company?

164 A. That was certainly included——

Q. Was that the cause?

A. —in the arrangement by which I myself procured his signature to the petition. And I may say that I do not think that he alone would have procured sufficient signers to have satisfied the statute to that petition. But he did take advantage of the situation to avail himself of the right of an inhabitant and tax-payer to get rates fixed.

Q. Who was the consumer to whom you refer?

A. That was the present police justice of this city Mr. Hayes.

Q. Have you not contended, Mr. Haines, from the first, and throughout this entire litigation, including the litigation before the board of supervisors for the fixing of these rates, that as between the company and the consumers the board of supervisors had no power or jurisdiction to fix or change the rates?

A. I do—I have, and I do think so now.

Q. Then how does it happen that you are here today representing the board of supervisors, as the representative of the district attorney, in endeavoring to uphold the ordinance passed by them, after having appeared before them as an attorney and protested against their passing an ordinance at all, on the ground that they had no jurisdiction to fix or change these rates?

A. There are two reasons. In the first place, if upon final adjudication of causes involving the question which are now pending the courts shall hold that the board of supervisors may fix rates which shall change the relation of consumers to the company, I personally desire that the true merits of this ordinance be developed in this litigation. Secondly, Mr. Sweet is about to go out of office, on the first Monday in January, and Mr. T. L. Lewis, the district attorney elect, will succeed to the charge of the litigation and

165 I am to act as assistant district attorney for Mr. Lewis, at his request, and in the division of the labor it is the understand-

ing between him and me that I shall give special attention to this cause, being more familiar with it than he is.

Q. When was this arrangement made that you were to give special attention to this particular litigation when you become one of the incumbents of the district attorney's office?

A. Well, that was made something like—I can't say—some three weeks ago I think.

Q. Do you not understand that the defense that is made by the board of supervisors in this action is directly inconsistent with, and antagonistic to, the position that you took before the board of supervisors under your protest and that you have taken all along in this litigation?

A. Not at all, sir. The question whether this is a proper ordinance is entirely distinct from the question of those upon whom it may operate. It may be a perfectly proper ordinance as respects those who desire to become consumers, and it may by the adjudication of the courts be held to have no application at all to those persons who have contract rights. It is not inconsistent in any shape or form. And moreover the rate fixed by the board happens to coincide with the rate that had been fixed by the corporation for eight years; and in that point of view the ordinance here does not conflict with what I conceive to be our rights, if it shall finally be held that such an ordinance does govern the *ral*tion of existing consumers who have vested rights.

Q. But do you not know that the defense of the board of supervisors, as indicated by their answer, is upon the ground that they have power and jurisdiction to fix these rates, and that in their answer they deny that they were fixed upon the theory advanced by you that they had no power to fix any rate except that
166 agreed upon between the company and the consumers?

A. I know that the board takes the view that they have nothing to do with any of these contract rights. I do not understand that the defense of the board here goes into the legal theory as to the scope of the ordinance in affecting prior rights. The defense made by the board is based entirely as I understand it—more particularly since I have seen the findings made by the board, which were not known by me to exist, except that I had heard a rumor that they had investigated the question and made figures—upon the position that they have followed the statute in the fixing of rates, and their defense leaves it an open question as to the operation of section 11½ of the act of 1885 upon vested rights. I do not understand that there is involved in this litigation, or in the position of the board, a denial that vested rights shall be respected.

Q. You understand, do you not, Mr. Haines, that the supervisors in making their defense have expressly denied that they fixed the rates upon the theory that there were vested rights, and that they allege that they fixed them upon the theory that they had the power and authority to fix reasonable rates as between the company and the consumers, and that the rates fixed were and are reasonable?

A. Without consulting the answer filed by them I can't now say

whether there is anything in such answer which claims that they had the right to fix rates as between the company and existing consumers who have vested rights. I do understand that the theory of the board is that in enacting this ordinance they made no reference to existing rights, were not controlled by any consideration of water rights, but proceeded according to their view of the statute in ascertaining what they supposed to be required by it, and fixed rates accordingly.

167 Q. And are you now and do you expect to carry on the defense of this proceeding upon the ground that the board of supervisors have the power and jurisdiction to fix reasonable rates as between these parties, irrespective of vested rights, and that the rates fixed by the board are reasonable and just, and the ordinance for that reason valid?

A. I shall reserve my legal argument to be addressed to the court at the proper time.

Q. If such defense is made as outlined by the answer made by the board of supervisors, do you not understand that that would be directly in conflict with the position you took before the board at the hearing there?

A. As I understand the question presented in this case, it is whether the ordinance rates are reasonable under all the facts in the case bearing upon the expenses of operation, maintenance, and management, and the value of the works used and useful for furnishing water under the system, without regard to any water rights or easements in the system already acquired, or to how they were acquired. I do not understand that the pleadings in this case present any questions relating to the contention made by the consumers before the board; I do not therefore believe that the defense for the board of supervisors presented in this case is, as the case stands, inconsistent with contention of consumers that is not presented here. I do not see that the defense here made by the board has any bearing upon the question of the rights of owners of easements not involved in the case.

Q. Did you draft or prepare the answer of the board of supervisors in this case?

A. I did not, but Mr. Sweet did consult with me in preparing the answer. Mr. Sweet conducted the litigation himself, except that he did consult with me two or three times during its course.

168 Q. Is not some part of this answer drawn by you in your own language?

A. I think it is perhaps true that a part of the language of his draft of an answer was revised by me.

Q. Has not Mr. Sweet been in consultation with you from the beginning of this litigation, so far as he has participated in it, as to the various steps to be taken and how they were to be taken?

A. I think that Mr. Sweet did consult me about exceptions to the bill of complaint; also, as I have suggested with respect to the answer. I had nothing to do with the preparation of any brief by Mr. Sweet in the cause, and did not see any printed briefs or any

typewritten briefs by him prepared until after submission to the court.

Q. Were any of the exceptions to the bill prepared by you or suggested by you?

A. I think a number of them were.

Q. Were the whole of those exceptions prepared by you?

A. I can't say that. I think that those exceptions were prepared by Mr. Sweet and myself in joint consultation.

Q. Did you furnish or aid in furnishing authorities to sustain the exceptions or demurrer to the bill yourself?

A. I think I furnished a reference to perhaps two or three citations. The collection of authorities, however, as I heard Mr. Sweet present them orally before the circuit court at Los Angeles, and as embodied in his brief afterwards submitted, and indeed the credit for all the argument, belongs to Mr. Sweet and not to me.

Q. If you have taken this active part in consultations and assistance in the preparation of the case for trial, why is it that you
169 have not appeared as one of the attorneys in the case of record?

A. I would have had no hesitation whatever in appearing of record as attorney any more than I have now but for the fact that, if I had appeared, I would have been compelled to dance attendance at Los Angeles upon the cause at a great expense both of time and money, which I have not hitherto felt able to do.

Q. Have you not been present when any of these matters have been argued before the United States court, where they came up?

A. I was present when Mr. Sweet presented some matter before the court, but I was at Los Angeles upon another case; I was not taken there by my desire to be present to hear his argument, although I gladly availed myself of the opportunity of listening to a very good argument made by him.

Q. Has the fact that you were reserving the right of yourself and the consumers whom you have been representing to contest the power and jurisdiction of the board of supervisors and of the circuit court of the United States to fix or determine any rates as between the company and its consumers had anything to do with your refraining to appear as an attorney of record in the case?

A. Not the slightest. I had no more hesitation in appearing then than I have now in appearing in the cause. As I have said, the reason was entirely because it was overburdensome to me both financially and in the matter of labor to do so prior to this time.

Q. You were under the employ, were you not, of the consumers to protect their interests during those times as an attorney?

A. I have no employment from the consumers in this cause, and never have had. What I have done was entirely gratuitous, so far as they are concerned, and from my personal interest in the cause.

Q. I am speaking of your employment generally to protect their interests, not with reference to employment in this particular,
170 case.

A. As is well known, I am an attorney in the case of Lanning against Osborne *et al.* and of Osborne *et al.* against Lanning, which cause is now in the Supreme Court of the United States, in

which I hope some authoritative settlement may be made of many questions now left in doubt respecting the whole situation between the company and consumers. I do not think that I am chargeable with inconsistency in appearing in those causes, and appearing here to show, if we can, to the court that the board of supervisors was justified by the evidence in passing this ordinance, reserving the question of its scope for such determination as may be reached by the courts either in Lanning against Osborne or some other cause.

Q. You never did appear or act as the attorney for the petitioners in the proceeding before the board of supervisors, did you?

A. No; I did not.

Q. Do you know why it was that Mr. Shaw, who was their attorney in the proceeding before the board of supervisors, did not follow up the litigation in the United States court?

A. I think the reason was that the board of supervisors decided not to employ any counsel. He would have been employed I suppose, if any had been employed by them outside of the district attorney.

Q. Were you a party in any way to the effort made before the board of supervisors to induce them to employ outside or additional counsel to assist in the defense of the case in the United States court?

A. I know—I remember that I desired personally to have Mr. Shaw assist Mr. Sweet; I may have said something to the board about it; I can't recollect specifically, but it seems to me that I did,
at one time, appear before them and suggest that it was ask-
171 ing too much of Mr. Sweet to make him carry this litigation,
and that it would be a proper matter in which to aid him.

Q. At all events you know that through and at the instance of the consumers an effort was made to have the board or supervisors employ additional counsel, do you not?

A. I think some consumers appeared before the board and made the suggestion.

Q. Was not that done through some of the attorneys of the consumers?

A. No. I think some of the consumers in person went there.

Q. Was not Mr. Ward, your partner, there for that purpose?

A. He may have been, for all I know; but I don't know the fact.

Q. Why was it, if the expenses of carrying on the litigation before the board of supervisors in behalf of the petitioners was, or was to be, born by the consumers, that they did not continue the payment of the necessary expenses in continuing the employment of Mr. Shaw to litigate the question further—do you know?

A. I think I can state with some accuracy. The truth of the matter is that the attempt of the people under this system to pay the present water rates and to maintain themselves upon their ranches, is such that they are left without means, generally speaking, to contribute to the employment of counsel to protect themselves in this litigation with the company; so much so, that they have not been able to pay me fully for my services in the circuit court in the cause

of Lanning against Osborne; nothing at all in the cause of Osborne against Lanning; nothing in the cause in the supreme court; nothing for appearing before the board of supervisors; and they are actually unable, generally speaking, to employ coun-
172 sel in this case. The situation is a severe one for the consumers under this system. Especially during the past year have they suffered by reason of the fact that the water supply of this company was only about one-half sufficient in the spring, and was absolutely suspended about the 26th of September, for irrigation; the result of which is that they have lost a great proportion of the orange crop, and their trees are very much injured, and the lemon crop is injured; and I may say further that the water remaining in the reservoir became during the latter part of the summer so bad that the people were compelled to haul water from wells and the like for house use, and even for stock, especially milch cows. At the same time the company have been collecting the ordinance rates without let-up and has, as I believe, been a party to a proceeding instituted by National City at its instigation to enjoin all irrigation under the system. They sent out notices, after submitting to an injunction in the case of National City against the San Diego Land and Town Company without any defense, to all consumers on the 28th day of September, 1898, in which they stated that water had been cut off from all consumers except for domestic purposes, and advised consumers that as a further protection against proceedings for contempt they were notified that they were not to use water for any purposes mentioned in the writ of injunction in the case of National City against the company under penalty of having all water cut off from the premises of any one so using the water, and under further penalty provided by section 625 of the Penal Code of California. In accordance with this the people stopped using water for irrigation, with the result I have stated, until some time during this month the company by its general manager procured an amendment in the suit of National City against the company, by making certain consumers who declared that they would irrigate defendants, and upon hearing had upon an order to show cause why they
173 should not be enjoined from irrigating the court denied the injunction. Since that time a very limited amount of water has been used generally by the consumers to irrigate their trees, but the supply is very small, and the damage had largely been done. These reasons will show why people under this system have felt unable to employ counsel in this case.

Q. Do you mean to say that the matter that you have injected into the record here of occurrences this year in respect to shortage of water had anything to do with the failure of the consumers a year ago or more to continue the employment of Mr. Shaw in this litigation?

A. I say that the drain upon the community already sustained in carrying on litigation together with the fact that almost without exception the people have been growing poorer in the attempt to maintain their orchards, even under existing water rates, has been such that it is my belief that they are, as a mass, unable and

have been during the past year to raise money to conduct this litigation.

Q. Will you be kind enough to answer my question. Do you mean to say that these occurrences that have been taking place this year during the shortage of the water supply had anything to do with the failure of the consumers to continue the employment, or to contribute to the payment of the expenses for the employment or continued employment, of Mr. Shaw?

A. I say that the consumers would be very glad to employ Mr. Shaw now, would have been glad to employ him ever since this case was begun, if they had been able to do so. I say that they felt unable to do so when this cause was instituted, and that their inability to do so is very much accentuated by the facts that I have stated in respect to their losses by reason of short water supply during the past year.

174 Q. You must certainly under- my question. Will you be kind enough to answer it directly and not by argument?

A. Will you read the question again?

Q. (Read.)

A. Of course I do not mean to say that the damage sustained by short water supply operated before it was suffered in disabling the people from contributing to the employment of Mr. Shaw, but this short water supply became apparent and operated from the beginning of the irrigating season of this year, and has had more or less effect all through the year. Mr. Shaw was not employed when this case was begun because people then felt unable to do so. I don't mean to say that subsequent events affected their means at that time. But it has done so since this cause was begun, and is having its effect now.

Q. If, as you say, the matters referred to occurring during the shortage of water supply had nothing to do with the question as to the employment of Mr. Shaw, or his not being employed at the time it was necessary that an attorney should appear for the petitioners, why is it that you inject that matter into your answer in this case?

A. I regret very much that counsel for complainant should go into irrelevant inquiries of this kind, but as I understood the course of interrogation by Judge Works it was an attack upon my appearing in this cause and upon the course of the consumers in not having Mr. Shaw in this case now and from the time this cause was begun, and I have stated truthfully, as I believe, the reason why he is not now an attorney in the cause and why he was not from the time it was begun. I may express the hope that this course of interrogation will not go further.

Q. You understand, do you not, Mr. Haines, that one of the allegations of the bill in this case is that the transaction before

175 the board of supervisors was procured to be brought in the way of petition by and in the interest of the consumers of the company, and that they have refrained from in any way participating in the prosecution of that petition for the reason that they are asserting their rights in the case of Lanning against Osborne, and

contesting the right of the board of supervisors to fix or change the rates existing as between the company and the consumers?

A. Without attempting to compare the question with the bill, I am shown a copy of the bill, and I recognize what it contains.

Q. You know, do you not, that that portion of the bill was excepted to, and the exceptions overruled?

A. I do not recollect now about an exception; it may well be so; and I was not aware of what the ruling of the court upon the exception was, except as you intimate.

Q. If there were such an allegation in the bill, and the allegation has been sustained by the court as against an exception to it, why should you express surprise or regret that counsel for the complainant are making inquiry from you, one of the consumers, to ascertain the whole facts with reference to that matter?

A. Because there is an assumption that there is something improper in my appearing in this cause now, or in the fact that the consumers did not employ Mr. Shaw, which I think is both unfounded and unnecessary.

A. If counsel who appears so understands the inquiry, as questioning the motives of counsel or the consumers in the course they have taken with reference to the non-employment of Mr. Shaw, or of the appearance of the witness as an attorney in this case, any such intention is disclaimed; but it is claimed by counsel for the complainant that the position of Mr. Haines as a protestant before the
176 board of supervisors and the position that must be taken in the answer in this case in defense of the suit brought are inconsistent as matter of law, without in any way intending to reflect upon the motives or purposes of counsel.

12.30 p. m.—Hearing continued until 2.00 p. m. of this day.

2 O'CLOCK P. M.

Q. Do you know, Mr. Haines, who of the consumers or the committee for the consumers disbursed the funds that were contributed by the consumers to pay the expenses of that litigation?

A. Mr. F. S. Erle was made treasurer of this association of water-consumers. So far as I know, all disbursements of funds collected by them was made by him.

Mr. WORKS: I believe that is all, Mr. Haines.

VICTOR E. SHAW, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?

A. Victor E. Shaw.

Q. What is your profession?

A. That of an attorney-at-law.

Q. Were you one of the attorneys for the petitioners in the matter of the petition to the board of supervisors of San Diego county for

the fixing of water rates for the San Diego Land and Town
177 Company of Maine that is in controversy in this suit?

A. I was.

Q. Up to what point in the litigation did your employment continue?

A. My employment ceased with the hearing before the board of supervisors.

Q. By whom were you employed in that matter?

Mr. HAINES: We object to this course of examination, on the ground that it is immaterial and irrelevant to the issues in this cause, particularly the question of the reasonableness or lawfulness of the ordinance rates fixed by the board of supervisors in the proceeding mentioned.

A. I can't say positively.

Q. Will you state the facts and circumstances under which you were employed and acted as the attorney in that proceeding?

A. My recollection is, that some two or three weeks before the day set for the hearing, either Col. Rippey or Judge Haines spoke to me with reference to being employed on behalf of the petitioners, and stated in substance that it was not likely that the petitioners could pay me a fee commensurate with the services to be rendered, and requested that I fix the fee as low as I felt justified in doing. I replied, as near as I remember, that I would go into the case to some extent *pro bono publico*, but would not fix other than a reasonable fee, but would leave it to the petitioners and the people interested to pay me what they could, leaving it practically with them to pay what they pleased. Subsequently to this conversation one of the gentlemen hereinbefore referred to began conversation with me upon the subject, and either by letter or oral communication some of the petitioners spoke to me with reference to my employment. I think it was by a letter received from some one of them, or
178 more than one, purporting to act as a committee.

Q. Do you remember now who those persons were from whom you think you may have received a letter?

A. I do not.

Q. Are you sure that they were a part of the petitioners?

A. Yes sir; I am sure of that.

Q. Was anything said in any of these conversations about the consumers who were not petitioners contributing towards the expense of your employment?

A. I do not remember of anything of that kind being said, though I understood from some source, or in some way, that others than petitioners would contribute towards my compensation.

Q. Do you know why it was that in making that petition it was filed on behalf of persons who were not consumers under the system, and that none of the actual consumers at that time were made parties to it?

A. I can't say that I do.

Q. Did either Mr. Haines or Col. Rippey say anything to you about why they were not appearing in the matter themselves?

A. I think they did.

Q. What reason did they give, do you remember?

A. My recollection is indistinct, but as I remember it the reasons given me by either Col. Rippey or Judge Haines were that certain parties within Chula Vista—that the rights of certain parties in Chula Vista and Sweetwater valley were different from those living under other portions of the distributing system, and they deemed it best that they should be represented by separate counsel. I think it was also stated that these consumers were composed and consisted of three classes.

Q. Did you understand, when you undertook to act for the petitioners in that matter, that they were not at that time consumers of or taking water from the system?

179 A. No sir, I did not; on the contrary, I understood that they were.

Q. When did you first learn, if at all, that they were not?

A. I have not learned it at all.

Q. You remember, do you not, that it was testified on the hearing that none of them were consumers—by Mr. Savage, the engineer?

A. If so, I had forgotten the fact. And if I learned it then from the testimony, that I think was the first time that I knew it.

Q. Who paid you for your services?

A. I think I received a check through the post-office, signed by some one by the name of Erle.

Q. Did you know at that time who Mr. Erle was representing?

A. I understood that he was treasurer of some organization composed of water-consumers under the Sweetwater system.

Q. At the time you were employed, or at any subsequent time during the progress of the proceeding, was there any understanding of any kind between you and Mr. Haines or Col. Rippey as to the manner in which the proceeding was to be conducted? That is to say, whether they were to appear in any capacity in connection with the investigation, to set up any rights of water-consumers in any way?

A. Yes sir. I understood that Col. Rippey and Judge Haines appeared for one class of the water-consumers, and intended to, and did, I believe, by some document filed, set up and claim certain rights for such class of consumers.

Q. Did you not learn upon the hearing of the proceeding that they actually appeared for all of the water-consumers instead of for a class only?

A. I may have learned it at the time. I am stating now

180 my recollection of what occurred.

Q. I call your attention to a paper set out and made a part of the bill in this suit, commencing on page 8, line 11, and ask you whether that is the document which you refer to as having been filed by Haines & Ward and Col. Rippey? (Hands witness paper.)

A. I believe that is the paper, though I have no recollection of ever seeing it before, and have no recollection of seeing it before it was filed, but remember that something of the kind was read by Mr. Haines to the board of supervisors.

Q. At the time you were first spoken to either by Mr. Haines or Col. Rippey, or at the second interview that you say you had with one or the other or both of them on the subject, was anything said at that time about their desiring to appear in the case for the purpose of representing and protecting the interests of any of the consumers under the system?

A. There must have been, because I understood that they would appear, and I think asked upon being told that I was expected to take charge of the hearing why it was that they did not manage the case themselves; but I do not recollect what was said.

Q. Did you prepare the petition that was subsequently signed and filed yourself?

A. I think not.

Q. Do you remember who did prepare it?

A. I do not.

It is stipulated, that the petition filed by the petitioners in the proceeding above referred to was prepared professionally by Mr. Haines, the witness whose testimony is set out above, and that,
181 assuming the fact testified to by the last witness, Mr. Shaw, that his fee was paid by the check of Mr. Erle, that the money so paid was paid out of the funds raised by the consumers under the system of the complainant herein, for the payment of the expenses of litigation between them and the San Diego Land and Town Company.

Mr. HAINES: That is admitted subject to the objection that these facts, and all others of like character, are irrelevant and immaterial in this cause.

By Mr. HAINES—Cross-examination:

Q. The colloquies, as taken down before the board of supervisors, show your position as counsel in the cause, do they not?

A. I think so.

H. N. SAVAGE, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. Are you the same H. N. Savage that testified in the proceeding before the board of supervisors in this matter?

A. I am.

Q. Are you still the engineer of The San Diego Land and Town Company, the complainant?

A. I am.

Q. You were not asked, I believe, upon your examination before the board of supervisors with reference to the depreciation of the pipe lines and other portions of the system of the company.
182 Have you made any investigation or endeavored to ascertain what the extent and percentage of depreciation is of the pipe lines from natural wear and tear?

A. In the operation and maintenance of the pipe lines of the water

system I am familiar with the wearing out of the various portions of the system.

Q. What is the effect of the soil where these pipes are laid, upon the pipes in the ground?

A. The soil in that section where these pipes are laid is varying in quality. A good deal of it seems to have a rapid corroding effect on steel and iron.

Q. What in your judgment is and will be the percentage of depreciation from this cause?

A. The exact percentage is impossible to state at this time. But the life of the pipe lines, as determined from their past operation, will probably average from ten to twenty years; in some cases requiring replacement in much less than ten, and in other cases probably some of the lines will last longer than twenty.

Q. Taking your knowledge in that respect as a basis, have you figured what would be the probable percentage of depreciation?

Mr. HAINES: We object to this as being immaterial, and an independent subject of inquiry, outside of annual repairs.

A. In my judgment, based on the condition of the pipe and its wear, I am of the opinion that six per cent. would be a fair and reasonable per cent. for depreciation.

Q. I wish you would explain as fully as you can what the effect of the soil is on the pipes, and how, and to what extent they are damaged by the effect of the soil?

A. The effect seems to be to corrode and rust the pipes in different ways. In some of the pipes the sheet is pitted in a
183 great many places, some of them breaking through, and we are able to plug the small breaks; in other cases a section of the sheet becomes corroded, and it is necessary to put on a patch; in other cases the corrosion seems to run along the grain of the iron, and after breaking through, and attempting to repair the leak by plugging, frequently we have to put in a series of plugs extending several inches along the pipe line. In many cases the sections of pipe, which vary, averaging about 16 feet in length, have to be entirely renewed. In some cases the rivets seem to be attacked most, and they give way, and either have to be repaired by a cement band around the pipe, or a band with a red run, and caulked.

Q. For how long a time, in your judgment, can these pipes that are attacked in that way be made serviceable and kept in use by the mere patching or repairing of the pipes?

A. That would be a matter depending on the policy of the owners. There is no line that I know that can be accurately drawn between annual repairs and actual replacement. We are replacing individual sections of pipe throughout practically all of that system.

Q. How long, according to the experience you have had, will it be until the entire system will practically be replaced with new pipe?

A. Probably some portions of the system will be in operating condition for a long term of years. The average life however of the

greater per cent. of the pipe will likely vary from ten to twenty years.

Q. How much of the entire system of pipes will, in your judgment, be destroyed and have to be replaced within ten years?

Mr. HAINES: Objected to as an immaterial and irrelevant
184 inquiry.

A. I could not answer that satisfactorily to myself without going back over the operation of the system for the past five years in detail. We have already replaced in ten years and have taken up because of its faulty condition several miles of faulty pipe.

Q. How long would it take you to arrive at the facts necessary to give an opinion satisfactory to yourself upon the question last submitted?

A. A few hours after having access to our books and plats.

Q. You could prepare the answer by tomorrow afternoon?

A. I think so.

Q. Can the depreciation that is going on in the system be made good by annual repairs?

A. Repairs won't maintain the system, because in many cases it is much cheaper to replace sections than it is to repair the number of leaks that occur along the sections.

Mr. HAINES: I should like to ask a question there for my information.

By Mr. HAINES:

Q. Do you limit the term repairs to stopping leaks in old pipes, and do you reject from its definition the replacing of any pipe?

A. In answering the questions asked I have assumed that repairs stop and replacements begin practically when the cost of repairing the pipe line per year amounts to considerable more than would the reasonable depreciation and interest on the new pipe. For example, on E street, Chula Vista, we had 550 feet of spiral pipe, 24 inches in diameter, and it became very expensive to repair the leaks
185 that were occurring from day to day on that section of pipe, so much so that in my judgment it was being much more expensive than would be the expense, as stated before, of reasonable maintenance and interest on a new pipe line; consequently that section of pipe was replaced about nine months ago.

By Mr. WORKS:

Q. What was the length of that section?

A. 550 feet in that individual case.

Mr. HAINES: You distinguish repairs from replacement even though the replacement is of but a single section of pipe, do you?

A. Yes sir; that would seem to me to be one point of division. As stated in the first case, it is impossible to draw the line accurately without some assumption between annual repairs, and repairs, and replacements.

By Mr. WORKS:

Q. Is there any portion of the system where you have been compelled to replace any considerable length of pipe line in one section?

A. Yes sir; there are numerous places throughout the entire system. One section of a mile of 24-inch pipe, at right angles, and connecting at one end with the 550-feet section, was replaced in the spring of 1895. And there are a number of ¼-mile sections of pipe of various diameters—12, 8, 6 inch diameter—that have been replaced.

Q. What are the indications at the present time as to whether there are other sections of the pipe line that will have to be replaced in the near future?

A. There are sections of pipe——

Mr. HAINES: One moment. We object to this, on the ground that as to future replacements the remedy provided for by
186 law is for the company to apply to the board of supervisors to revise or fix anew the allowance in rates for expenditures for repairs and maintenance.

A. There are sections of pipe throughout the system that will have to be replaced in the near future, several of the- in the next few weeks.

Q. Give the extent of the replacements in length that will probably have to be made, and the size of the pipes in the different cases.

Mr. HAINES: We make the same objection, that the remedy is to apply to the board of supervisors, to fix rates anew to yield the expenses for future repairs not already provided for by the present ordinance.

A. It is impossible to answer that last question with satisfaction to myself until after we get the full pressure of water due to a reservoir full. The increased pressure will undoubtedly develop weakness in a great many pipe lines that are now able to hold the limited pressure.

Q. Could you give some idea about what replacements will probably be necessary in the near future?

A. We have about ¼ mile of 24-inch pipe that will have to be taken out of the ground and repaired and relaid. In one place we have about ½ mile of 6-inch-diameter pipe that likely will have to be replaced within a year. We have some 8-inch pipe that will have to be renewed in sections—a total of a few hundred feet. We have a line of 12-inch pipe running into the ex-mission that weare already making frequent renewals of sections on, that will require extensive renewals when full pressure is restored; and it will require more or less renewals right along from month to month without any
187 additional pressure than it has been under the last thirty days, and throughout the entire system we have renewals that will have to be made in individual sections or part sections.

Q. How long have these pipes that you say now either have been or will have to be replaced been in the ground?

A. Mostly about ten years.

Q. Do you know what quality of pipe has been used by the company in constructing and maintaining its system?

A. The calamine tube pipe, which was the larger portion of pipe used, was considered equal to the best pipe manufactured for its durability, except cast iron of course. The pipe laid by the company in its 24-inch line in 1895 was said by pipemen and steel-manufacturing men to be the best quality of steel used in a pipe line, to their knowledge, up to that time.

Q. What is your judgment as to the quality of the pipe that was used?

A. My own judgment is that the wrought-iron pipe in the big main down through the Sweetwater valley, and the calamine pipe, and the steel pipe throughout was first-class pipe. The quality of the material in the spiral pipe, over which there has been so much trouble, was undoubtedly first-class quality. The design and treatment of the pipe proved to be detrimental to its durability.

Q. With the exception of the spiral pipe, has the deterioration or decay of the pipe been the result of the use of defective or improper material, or has it been the result of the condition and action of the soil upon the pipes?

A. It has been entirely due to the action of the soil on the outside of the pipe.

Q. What is the fact with reference to the effect of the soil
188 in that locality upon pipes in the ground as compared with the soil in other places? Is it more or less destructive than is ordinarily the case?

A. The destructive action of the soil through which this pipe system is laid is considerably greater than the average.

Q. Do you know why that is so?

A. Because of the chemical or physical action of the soil that is impregnated with alkali and other salts.

Q. Have you observed at all whether the effect of the soil is greater upon wrought iron, as compared with steel, or less?

A. The question of the durability of wrought-iron pipe or steel pipe has been carefully examined into and discussed for a long period throughout all countries using the two metals, and it is generally conceded, and my judgment is, that steel pipe is somewhat more durable than wrought-iron pipe.

Q. With respect to the destructive qualities of the soil in that locality, have you made any observations to determine upon which character of metal it is the most destructive?

A. I think steel pipe would outlast wrought-iron pipe in that soil.

Q. How much of that system is of steel as compared with other kinds of pipe?

A. The pipes laid previous to 1889 were mostly wrought-iron; and since that have been mostly steel.

Q. What proportion of the system as it exists now is of steel?

A. We have the 24-inch line from the dam to National City, about six miles in length is steel pipe. One line of 13-inch pipe, from just

west of National avenue, National City, running east to the eastern extent of the distributing system, about one mile, as I remem-
189 ber, is steel, with a right-angle extension, 9 inches, about half a mile from it running north. Then this one mile of 24-inch-diameter pipe that was replaced in Chula Vista in 1895 is steel, and the 550 feet that was replaced about nine months ago is mostly steel. There were one or two sections of wrought-iron pipe that had been used in replacing defective sections of spiral pipe before in connection with that same 550 feet that was repaired and relaid.

Q. Now by comparison what proportion of the system would that amount to in length?

A. Well, off-hand about one-tenth.

Q. Of steel?

A. Yes sir.

Q. Have you noticed with respect to the steel pipe whether the effect of the soil is comparatively the same upon the pipe as in the case of the wrought iron?

A. It is substantially the same.

Q. Then whatever the destructive quality in the soil may be, it is about equally destructive to the pipe whether it is of steel or of wrought iron?

A. There is very little difference as between the two, only the steel pipe is perhaps—is undoubtedly a little less affected in soil in general.

Q. What I am trying particularly to get at is the question as to whether the peculiarly destructive quality of this soil in that locality acts upon the steel pipe as well as upon the wrought-iron pipe?

A. The ratio of action would be substantially the same.

Q. Will you be able, without any considerable examination, to determine and answer what amount it has cost the company to make their replacements of these different sections of pipe to which you have referred?

190 A. I can give a close estimate.

Q. Can you answer that now without an investigation, approximating the cost of each one of the sections?

A. No; I don't think I could safely without going back to the maps and taking off some of the sections.

Q. Could you get at the data by tomorrow afternoon, by which you could answer that question?

A. I think I can.

Q. You were asked in your examination before the board of supervisors in this matter, I believe, what quan-ity of water in a reservoir you thought it necessary to reserve from year to year to meet any possible drought that might occur. Do you remember what quan-ity you testified to be necessary to make the system safe in that particular.

A. As I remember, we thought that about 40 per cent. ought to be retained at least. The past dry season, in which we got absolutely no additional supply into our reservoir, will make necessary some changes in the advisable operation of the system in the future.

Q. What has been the experience of the company for this last irrigating season, with reference to its water supply and the ability of the system to serve the consumers?

A. Heretofore the drainage basin has always yielded us some water for storage purposes, and also the rainfall of the winter has left the soil in a somewhat saturated condition. This past winter not only it didn't afford us any water for additional storage, but the ground was thoroughly dry at the beginning of the season, demonstrating that the duty of the system was less than it had been estimated to be from the observations of the preceding years through which it had been operated.

191 Q. What has been the extent of the ability of the system to supply water during the present season, or the last season? The last irrigating season?

A. We have been unable to supply the quantity of water that the orchards reasonably required.

Q. About what proportion of the full supply that you had formerly furnished have you been able to furnish this year?

A. I have not any figures at hand to show accurately, but in round numbers probably about one-third the quantity of water has been delivered this year that has been delivered in past years per acre.

Q. What is the condition of the reservoir at the present time as to its supply of water?

A. The reservoir is substantially empty.

Q. You say "substantially." Are you able to supply any water for irrigation at the present time?

A. It is doubtful if there is any water running in the pipe line from the reservoir at the present time.

Q. When was the supply entirely exhausted?

A. The supply was exhausted the 9th day of this December.

Q. Previous to that time was there any notice given by the company warning the consumers against the use of water for irrigation purposes in view of the limited supply?

A. There was the last week in September; such a notice was sent out.

Q. Did irrigation cease from that time on?

A. It did.

Q. Then you have had practically no water for irrigation purposes from the reservoir since the latter part of September

A. Until the recent court's decision——

192 Q. What court do you refer to now?

A. The superior court of San Diego county—Judge Torrance.

Q. Is that the case that has been referred to here, in which the question arose between the consumers of domestic water and those using it for irrigation purposes?

A. It was.

Q. I believed it was held in that case that there was no preferred right to the use of the water for domestic purposes, but that the irri-

gators were entitled to use water as long as there was any water in the system?

A. It was so held.

Q. What was the result of that upon the supply in the reservoir?

A. The supply was rapidly exhausted, lasting less than a week.

Q. Then with the present condition of the system, taking this year as a sample, you have no reservoir supply on hand for the coming year?

A. We have no supply whatever on hand at the present time.

Q. And the next year the consumers will have to depend entirely upon the water that can be stored by the rainfall?

A. They will, unless a supply be obtained from some other source.

Mr. WORKS: I believe that is all, except that I wish to have answers as to the two matters that have been left over.

By Mr. HAINES—Cross-examination:

Q. What in your judgment is the effect of the facts you have stated respecting the shortage of water supply during the past year upon the value of the system during that year?

193 A. The value of a piece of property, as I understand, is generally considered to be its selling value, or its earning capacity. The selling value or earning capacity of this system depends so much more on the rates that can be obtained from the water that may be reasonably available in it from year to year than it does on the one year's shortage, that while the shortage would of course decrease the duty of the system somewhat it would not necessarily be a serious factor in its value.

Q. Has the company regularly sent out its demands for payment of water rates under the ordinance here in question during the past year, and up to December 31 1898?

A. I understand that the compnay has done so; and it has done so with the recollection, if my memory is correct, that when this case was before the board of supervisors, it was generally stated by the attorneys that they believed it was the company'- duty to increase the duty of the system to a much larger acreage than it was then supplying, and that the consumers under the system would willingly pay the annual rates as fixed, and be content with a limited supply in dry seasons, which the statistics showed only happened at infrequent intervals.

Q. Did the company increase the duty of its system during the past year?

A. They did not, sir.

Q. In your estimate of the value of the system during the past year, or since the ordinance now in question was enacted, have you looked at the question having any regard to the utility of the system to the consumers, or have you entirely looked at it as a question of revenue for the company?

194 A. The question of the utility or value of this system to the water-takers has absolutely no influence over the cost of maintaining and operating the system.

Q. What effect ought it to have on the nett revenue of the system?

A. If the system is to be maintained, the effect of whether the consumers are making money rapidly, or only making a living, cannot increase the durability of the pipe lines, or in any way influence the action of the soil on them.

Q. My question was directed to whether in estimating the value of this system you took into consideration the utility of the system during the past year to the consumers or whether you rejected that element.

Mr. WORKS: We object to that, upon the ground that the witness has not fixed the value of the plant, or testified with reference to its value.

A. The question of the value of the system to the consumers under it would be a difficult one to answer. It is perhaps true that the value of the little water that has kept the trees in good existence mostly may in the outcome be just as valuable to them, except the single year's revenue, as if they had had the full supply. Except for the little water this year, the somewhat lessened supply, the damage would have been so much greater than it has been that the utility can only be a comparative one.

Q. You speak of a notice given to consumers in the last week in September by the company. I ask you to examine this paper, and state whether that is a copy of the notice sent out to the consumers? (Hands witness paper.)

A. I identify the notice as a copy of one sent to the consumers by the company at that time.

Mr. HAINES: I would like to offer this by copy.

Mr. WORKS: It can go right in the record.

195 Mr. Haines reads in evidence notice, as follows:

"Notice:—In a suit instituted for the purpose of ensuring a supply of water for domestic purposes, an injunction has been granted against this company enjoining us 'to absolutely desist and refrain from supplying, furnishing, delivering, giving away or using any water now in your water reservoir or water system, and supplied by your company or water system, to any persons under your water system for the purposes of irrigation and use of irrigation for irrigating farm lands, orchards, trees, lawns, gr-ves, gardens, alfalfa, grainfields, market gardens, nurseries, floral gardens, berries, small fruits, and any and all manner of farm, garden, and irrigated lands of whatsoever kind, until the further order of this court.'

Complying with this order, water has been cut off from all consumers except for domestic purposes, and as a further protection against a proceeding for contempt, you are hereby notified and warned not to use water for any purpose mentioned in the writ of injunction above quoted, under penalty of having all water cut off

from the premises of any one so using water, and under further penalty provided by section 625 of the Penal Code of California.

(Signed) SAN DIEGO LAND AND TOWN COMPANY,
By JOHN E. BOAL, *General Manager.*

National City, Sept. 28, 1898."

Q. The suit referred to in this card is a suit entitled: The City of National City against The San Diego Land and Town Company, filed in the superior court of San Diego county, California, is it not?

A. I believe it is.

196 Q. Did the company resist the application for this injunction?

A. I don't think they did.

Q. Did it suggest, or any officer of it suggest, to the trustees of National City the bringing of that action?

A. I don't believe they did.

Q. Did you, or any officer of the company to your knowledge confer with the trustees or any one of them with a view to the bringing of this action?

A. I don't remember distinctly what took place at that time. I am of the opinion however that I personally conferred with one or more of the trustees as to what was the wisest and most expedient action to take regarding the little quantity of water remaining stored in the reservoir.

Q. Your view then was, representing the company, that something ought to be done to prevent its being used for irrigation, was it not?

A. My opinion at that time was that that small quantity of water, in view of the fact that we likely would have rain that would irrigate the land in a reasonable time, and would in all probability afford no water for domestic purposes for two or three months, was more valuable for domestic supply than it was then to irrigate the orchards, that substantially all had been irrigated within a reasonable time.

Q. Then did the company, after sending out this card, send out its notices to consumers under the system to pay irrigation as well as domestic rates for the quarter ending December 31, 1898?

A. As I understand, they did, and that they felt justified in doing it by the claims made by the various attorneys in the action before the supervisors last October.

197 Q. By the attorneys for the consumers?

A. I remember particularly the attorney for the consumers.

Q. So the company accepted the suggestions of the attorney for the consumers so far as it was for its benefit?

A. The company acted as it thought it was wise, and felt that it was additionally justified in its action by reason of the claims of its water-takers by their representative.

Q. But when it comes to abiding by this ordinance during the past year the company objects, does it not?

A. As to the rate?
Q. Yes.
A. I understand it does.
Q. This mile of steel pipe which you say was put in at Chula Vista in 1895, was put in to replace a like extent of spiral pipe originally put into the system, was it not?
A. Yes.
Q. That original spiral pipe was put in when?
A. Before I entered the employment of the company. I believe it was put in in 1888 or 1887.
Q. From the time it was put in until the steel pipe was put in in 1895 could that pipe line be used?
A. I don't think it was ever used successfully.
Q. The pipe was taken up, was it?
A. It was.
Q. And rejected utterly?
A. It was.
Q. It ornaments the waste places of Chula Vista, does it?
A. It ornaments in a useful way Warren Kimball's orchard and Mr. Henderson's orchard as a successful drain pipe when the flood is not too heavy.

198 Q. That is, about four sections of it?
A. No—about four sections of 600 feet each.
Q. The company spent a good deal of money, didn't it, in trying to make that pipe work?
A. I understand that it did expend some money.
Q. What devices did they employ to make it work?
A. The pipe when I came to the company had been, I judge from contracts on file, taken up, and the connections between the sections had been rejected and a new form of joint had been designed and put into operation unsuccessfully. I don't recollect what the expense of repairing that section of 24-inch pipe was.
Q. Was that the first attempt at it?
A. The repairs of the spiral pipe were all done before I came to the company. I understand however, from contracts and from hearsay, that a portion of it—that several attempts were made to repair and use this pipe. Some of it was repaired and has been in successful operation constantly since—some of it was repaired, and has been in operation since, and has been replaced. The 550 feet section referred to of 24-inch pipe on E street was supposed to be identically the same pipe, and was in operation ten years, under the same or greater pressure than the other.
Q. It cost for repairs a large amount?
A. It takes money for repairs, a large amount of money.
Q. That was charged up from year to year to the system?
A. It was, I suppose.
Q. As repairs?
A. I suppose it was.

199 Q. That 550 feet is all of that 24-inch spiral pipe that was used at all, was it not?
A. Of the 24-inch spiral pipe—yes sir—I think it was.

Q. Now that mile of steel pipe that was put in that system in 1895 was part of the system when the present San Diego Land and Town Compnay of Maine became the purchaser at judicial sale of this system, was it not?

A. I believe it was.

Q. The San Diego Land and Town Compnay of Maine did no business in this system, did it, prior to the time that it became the purchaser and grantee of the property of the San Diego Land and Town Compnay of Kansas, in June 1897?

A. I believe it did not.

Q. I believe you state that unless rains fall in sufficient quantity so that water can be collected in the Sweetwater reservoir, as the water system now stands it would be utterly useless for the supply of water during the coming year?

A. I believe I didn't state any such thing.

Q. What is the fact in that respect?

A. The fact in that case is that the distribution system would be of the greatest value in supplying water to the people.

Q. How?

A. By the development of a partial supply from water undoubtedly existing underground up and down the Sweetwater valley.

Q. In what way would that be developed?

A. It could be developed by pumping.

Q. Then you don't mean to say that if this system didn't make a catchment of water from rainfalls, and remained just as it now is, that it would be of any utility to the consumers under the system?

200 A. I believe it would be of great utility and would be used.

Q. You mean to say that if a water supply were developed anew by pumping it would be useful?

A. I do.

Q. I am asking you what its utility would be if the dam caught no water, without developing an additional water supply by pumping?

A. It would have no utility to the water-consumers if there was no water available for delivery through it.

Q. As far as you now know, from any facts that now exist, that system is absolutely useless for the future?

A. To the contrary, from the facts that now exist there is every probability that it will be of great use in delivering a full quantity of water to the water-takers.

Q. You mean, not according to the facts that now exist, but according to the probabilities, don't you?

A. According to the facts that now exist, by reason of rainfal- records of some forty years here.

Q. Your company has made no application to the board of supervisors, has it, to fix rates anew for the future?

A. Not to my knowledge.

Q. Why would it not be more advisable to apply to the board of supervisors to fix these rates anew, under these cheering circum-

stances, than to apply to the court to set aside the present existing ordinance?

A. I don't feel called upon to express an opinion on the wisdom of our company in going to law optional with making an appeal to the supervisors to make a change of what they have done, with the introduction or repetition of substantially the same evidence
201 that has been furnished them for establishing the past rates as fixed by them.

Q. It would be somewhat incongruous, would it not, to ask the board to fix rates for furnishing water you are not in a position to furnish at all, would it not?

A. It certainly would look a little peculiar at this time.

Mr. HAINES: I think I will reserve the right to continue the cross-examination of Mr. Savage when he answers those questions.

By Mr. WORKS:

Q. With respect to the contracts you refer to for taking up and doctoring and replacing that spiral pipe, do you know that the contract was that unless the pipe as relaid should work successfully nothing was to be paid?

A. I have a recollection of some such clause in the contract.

Q. Don't you know that the pipe did not work successfully in the main, and was not paid for at all by the company?

A. I am sorry to say that I don't recollect that to be the exact conditions.

Mr. WORKS: That is all for the present. We shall ask you to get those data for us and will take it up again tomorrow afternoon.

JOHN E. BOAL, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?

A. John E. Boal.

202 Q. You have heard Mr. Savage's reference to the taking up and putting down again of that spiral pipe, with some reapirs upon it or changes. Do you know whether the company was put to any expense on account of that work?

A. The 24-inch line at Chula Vista was taken up, cleaned, and delivered to the points designated in the contract at the company's expense. The repairs and relaying of the pipe were to be paid for if the pipe held true. It failed to do that, and the company refused to pay the pipe company.

Q. And it was not paid, according to your recollection?

A. It was not paid, according to my recollection.

Q. Have you any present recollection about the cost of taking up and cleaning the pipe, or about what it was?

A. No, I have no recollection.

Q. Was it a large expense?

A. It was a number of hundred dollars, I should say.

Q. I believe you testified on a hearing before the board of supervisors what your connection with the company, was, and how long you had been connected with it, so we will not take up that matter again. Have you observed the effects of the soil in which these pipes are placed upon the pipes in the ground?

A. I have.

Q. I wish you would explain what has been the effect of the soil upon the pipes?

A. In many places the pipes have rusted through in places so that repairs were necessary, and in others the destruction of the pipe was so great that it had to be taken up and replaced.

Q. To what do you attribute that destruction of the pipes?

A. I attribute it to the acids in the soil.

Q. From your observation is the quality of the soil in that
203 locality such as to be more than usually destructive to pipes?

A. My knowledge of other localities is so limited that I scarcely feel like expressing an opinion on that.

Q. What, in your judgment, is the percentage of depreciation of the pipe lines to the company?

A. My opinion is, about six per cent. per annum.

Q. Do you think that would be a reasonable estimate to give, judging from your experience of the effects of the soil on the pipes?

A. I think it would be a reasonable estimate.

By Mr. HAINES—Cross-examination:

Q. What use could the company make in maintaining its system year by year of six per cent. of the value of the whole pipe line?

A. In the early life of the pipe it would require a very small part of that sum; as the pipe grew older a larger amount would be needed, until a time would be reached when very large replacements would be required; probably the annual replacements would be considerably greater than the amount yielded by the six per cent. charge.

Q. How many years after the pipe had been laid would you think the last contingency would occur?

A. Well, I expect it would occur in from ten to twenty years after the line was laid.

Q. You remember the paper marked San Diego Land and Town Company's Exhibit No. 1 introduced before the board of supervisors?

A. I have a general recollection of it.

Q. That was prepared under your direction and Mr. Savage's, was it?

A. Yes sir.

204 Q. It was the statement laid before the board by the company as a basis for the company's proceeding to fix rates, was it not?

A. I believe so. Will you let me see that? (Paper handed to witness.)

Q. Does such exhibit show that the depreciation of this pipe line had arrived at such a stage when this case was submitted to the board, that the expenditure of six per cent. upon the value of the pipe line was necessary to make the repairs and replacements?

A. It does not show that it would have been necessary in that year to have made the replacements.

Hearing continued, by consent, until two o'clock p. m. tomorrow, December 15, 1898.

205 SAN DIEGO, CALIF., *December* 15, 1898—2 o'clock p. m.

JOHN E. BOAL resumes the stand.

By Mr. HAINES:

Q. What is the thickness of the water pipe used in this system?

A. It varies greatly, and without an engineer's report I would not be able to give anything but a mere guess.

Q. State as nearly as you can with respect to the leading *mins.*

A. The 36 and 30 inch mains, as I recall, are ranging from No. 6 or 7 Birmingham wire gauge, to No. 9; the 24 inch about No. 9 or 10; the calamine pipe probably somewhere between 7 and 9. I would like to say, I would very much rather you would get this information from the records or from the engineer, because he can tell you what it is, while I have to guess at it.

Q. Has the system any cast-iron pipe in use?

A. It has not in its distributing portions.

Q. Cast-iron pipe is the best pipe for use as water pipe, is it not?

A. Well, that is not a subject that I feel very competent to give testimony on. I suppose it is the best pipe.

Q. What is the thickness as measured in inches of the Birmingham wire gauge ranging from 6 to 9?

A. I am unable to say.

Q. Give it as approximately as you can.

A. From $\frac{3}{16}$ to $\frac{1}{4}$ inch.

Q. Which is the $\frac{1}{4}$ inch.

A. That is the latitude I give myself in making this guess.

Q. And the Birmingham wire gauge 9 to 10, what did you say is its thickness?

206 A. It would be lighter of course. It would be, I should say, from the neighborhood of $\frac{1}{8}$ inch to $\frac{3}{16}$ inch.

Q. The pipes originally laid were they iron or steel?

A. I believe they were iron, except as to the spiral pipe, and my understanding is that it was steel.

Q. The spiral pipe you speak of is that rejected pipe mentioned in the testimony?

A. Yes sir.

Q. What is your observation as to which corrodes faster, the iron or the steel pipe?

A. I have never made a study of that. The steel pipes were laid after the iron pipes were.

Q. Where was the steel pipe laid?

A. In replacement of the 24-inch line. at Chula Vista, and in the pipe line No. 2; and there may have been some other sections that I don't recall.

Q. How long have these been down?

A. The 24-inch replacement at Chula Vista and pipe line No. 2 were laid in the spring of 1895, almost four years ago.

Q. And you say you have not made observation of the effect of corrosion upon that steel pipe?

A. I have not upon the steel pipe.

Q. Your company collects domestic rates outside of National City, under the ordinance as passed by the board of supervisors involved in this case, does it?

A. It does.

Q. Is there any conflict between the compnay and consumers in respect to the domestic rates as fixed by the ordinance?

A. Not that I am aware of.

207 Q. Is it or is it not true that the board of supervisors were informed by the concurrent action of the compnay and the representatives of petitioners and consumers named protestants before the board, that the rates as now fixed in the ordinance for domestic uses were satisfactory to all?

A. I believe it was stated before the board.

Q. Is it true that as population increases upon the tracts already settled outside of National City the income of the compnay from domestic rates increases relatively faster than the income from irrigation rates?

Mr. WORKS: I think you are getting onto a subject that is fairly covered in the previous testimony; at least that is my recollection.

A. I can see where that might be true if the present irrigated lands were to be more thickly peopled than at present.

Q. Have you made any estimate of what proportion of the water used for irrigation, at $3.50 per acre per annum, would yield the same amount if used for domestic purposes at the rates prescribed in the ordinance?

A. I have made no such calculations.

Q. Can you give an estimate?

A. I might make an estimate.

Q. Please give the best you can?

A. One-thirtieth.

Mr. WORKS: That is to say, it would take one-thirtieth of the quantity of water to bring the same amount?

WITNESS: Yes sir.

Q. How many acres of land outside of National City, not owned by the San Diego Land and Town Compnay, are served with water from pipe line No. 2?

208 A. I don't know what the acreage is. We have prepared no statement of it, and it would be an estimate that I would have to make with Mr. Savage.

Q. Can you put your heads together now and give an answer?

(Witness consults with Mr. Savage.)

A. I make it 145½ acres.

Q. How much has the San Diego Land and Town Company that is served by taps from the same main outside of National City?

—. 175 acres.

Q. How much land is served by that pipe inside of National City all told?

—. About 49 acres.

Q. Does this main reinforce the domestic supply of National City?

A. It reinforces the entire system, and of course reinforces National City and the ex-mission.

Q. I call your attention to the paper marked Lan- and Town Company's Exhibit No. 1, as filed before the board of supervisors on the 8th day of October 1897, and to the statement therein in the following words and figures: pipe line National City, $183,753.90. Is that the statement of the cost of the distributive system within the limits of National City?

A. It is a statement of that cost.

Q. That is, of the original cost of construction?

A. Of the original construction of the pipe lines within National City.

Q. It does not include then any portion of the cost of mains leading to National City but outside of National City?

A. It does not include any mains leading outside of National City.

Q. What is the distance from the points where the mains, pipe line No. 1 and No. 2, enter National City from the Sweetwater dam?

209 A. In the neighborhood of five miles. The pipe line No. 2, I believe, is the shorter of the two.

Q. Do most of the tracts under irrigation lie nearer to the dam than National City?

—. The Chula Vista lands—I think that a portion of the Chula Vista lands lie nearer the dam than National City; and the lands in Sweetwater valley are also nearer the dam. The lands in ex-mission are considerably farther from the dam than National City.

Q. What is the size of the main leading to the ex-mission lands outside of National City?

A. 12-inch.

Q. The San Diego Land and Town Company of Kansas was involved in a suit with one George Neale, was it not, over a portion of its reservoir site?

A. It was.

Q. When was that suit finally ended?

A. My recollection is, about the early part of 1891.

Q. Over how many acres of land was that contest?

A. 350 and a fraction.

Q. Is that all within the reservoir site?

A. It is.

Q. Can you state whether or not the company flooded these lands before it by condemnation proceedings or otherwise acquired them?

A. They flooded the land before they acquired title to it.

Q. Was the company required by a decree of the United States circuit court, or order of that court, to draw down the water in the dam in order to uncover the Neale land?

Mr. WORKS: You have that in the evidence certainly, but it
210 won't take long I suppose.

A. It was required to draw down the water.

Q. How was this effected?

A. By opening the waste weir, and by opening the main 30-inch blow-off on the 36-inch pipe, and I think by opening the 14-inch and 18-inch pipes leading through the dam.

Q. Was any other means adopted?

A. Not that I recall.

Q. Was there a canal drilled through the rock and earth on the side of the dam, leading into the dam?

A. A tunnel was constructed in the south end of the dam after the water had been drawn from the Neale lands.

Q. For what purpose was that tunnel constructed?

A. For the purpose of providing means of keeping the future winter's flood from overflowing the Neale land.

Q. Do you know what the expense of making that tunnel was?

A. My recollection is, $4,700.

Q. Was that added to construction or expense?

A. Construction, I believe.

Q. Do you know what the whole cost of the transaction with Neale was, including the attorneys' fees, costs, and amount paid pursuant to the judgment of condemnation of the land?

A. I do not.

Q. Can you give any statement as to that?

A. Not that I would consider at all accurate.

Q. To what were all those expenses, including attorneys' fees, costs, and the amount paid for the land under the judgment, charged up?

A. My recollection is that all attorneys' fees and court expenses were charged into general expense on the books of the San
211 Diego Land and Town Company, and were at no time charged into the construction of the water system. The amount paid Neale finally was charged up to the construction of the dam, or into what may have been called reservoir site, which was afterwards charged to the dam.

Q. Do you remember what the amount paid Neale was, under the judgment in the condemnation suit?

A. It was about $80,000, I believe.

Q. Now about what date was that?

A. About February 1891.

Q. When the San Diego Land and Town Company of Maine ac-

quired this system had the entire system as it now stands, and as it stood when this ordinance was adopted, been completed?

A. Substantially so.

Q. The statement referred to, marked Land and Town Company's Exhibit No. 1, contains nothing bearing upon the price paid at the judicial sale pursuant to which the San Diego Land and Town Company of Maine acquired the title to the water system here in question, does it?

A. It does not.

Q. Has your company offered before the board of supervisors, or thus far in this investigation, any evidence as to what was paid pursuant to the judicial sale in the case of H. R. Mandell against the San Diego Land and Town Company to foreclose the trust deed made by the San Diego Land and Town Company of Kansas for the water system here in question?

A. So far as I know, it has offered no evidence except what is furnished by the books of the company, showing the cost of construction of the system.

Q. This cost of the construction as so shown, and as shown by
212 this Land and Town Company's Exhibit No. 1, was entirely incurred while the Land and Town Company of Kansas was the owner of the property, was it not?

A. Substantially so.

Q. Can you state why the San Diego Land and Town Company of Maine has not furnished to the board of supervisors any evidence as to what was paid at the said judicial sale for the water system acquired from the San Diego Land and Town Company of Kansas?

A. The cost of construction has seemed to us—seemed to me—what ought to be presented to the board; and further, because the judicial sale was a foreclosure proceeding for the purpose of paying the debts of the old company, and could not be considered as a sale of property in the ordinary sense, and for that reason did not fix the value of the property sold.

Q Do you mean to say that this property, when it was offered at judicial sale, was not offered to the world at large and to the highest bidder?

A. It was offered as a whole to the highest bidder.

Q. Do you know why all the property real and personal of the San Diego Land and Town Company of Kansas was procured to be ordered sold as an entirety, instead of segregating the lands, the railway, and railway bonds, from the water system?

A. For the purpose of raising money sufficient to pay off the indebtedness of the old company, as I understand.

Q. Was there any reason why the sale could not have been made of the water system separate from the other property?

A. I know of no reason why that might not have been done; I know of no reason why it should have been done particularly?

A. I call your attention to a printed card, as to which I
213 will ask you whether it is one sent out by your company for the collection of water rent? (Shows witness card.)

A. It is.

Mr. HAINES: I desire to read this in evidence. (Reads.):

"San Diego Land and Town Company, water department.

"Checks should be made payable to the order of and all remittances addressed to E. A. Hornbeck, assistant treasurer, National City Cal.—This company claims that while the amount herein named is in accordance with the rates established by the board of supervisors, it is inadequate compensation for the water so furnished, and its right and claim to be paid for such water in full at such rates as may be hereafter fixed pursuant to a decree of court or otherwise is in no manner waived or compromised by the acceptance of the amount named below.

"NATIONAL CITY, CAL., 10, 4, 1898.

"DEAR SIR: Your water rent for the three months ending 12/31 is now due. Remit by check if convenient. Please return this notice.

"Register No. 144. Amount $17.85.

"Respectfully, E. A. HORNBECK,

"*Assistant Treasurer.*

"Delinquent after 15th of current month."

Q. Were like cards, except as to the amount of water rates adapted to each case, sent out to all consumers at about this same date for this same quarter year?

A. They were.

Q. At the time when this demand was made was water being furnished by the company for irrigation?

A. Water was not being furnished for irrigation at that time, it being a few days after an injunction had been secured against us to prevent the use of water for irrigation.

214 Q. Did the San Diego Land and Town Company of Maine encourage the bringing of this injunction suit?

A. The trustees of National City stated that they would apply for such an injunction, and we gave them to understand, I believe, we would not offer active opposition to it.

Q. Is the company now in a situation to deliver water for irrigation from its system?

A. Not in any large quantities. There is still a small quantity of water in the dam which might be delivered to the lower levels.

Q. But is it true, as Mr. Savage stated yesterday, that the supply is substantially exhausted?

A. It is true.

Q. Notwithstanding that fact, if it should be true that the company acquires no more water in its reservoir from its watershed, does the company still claim that it is entitled to the ordinance rate after the first day of January with the same reservations as made in the demand which has been read in evidence?

A. That is a contingency we have scarcely considered, and have made no decision as to what we would claim.

Q. Has the company in any way intimated to any rate-payers

that they remitted or would remit any portion of the irrigation rates for the quarter ending December 31 1898?

A. Not that I know of.

Q. You would know if it had, would you not?

A. Probably. The financial part of the company's business is entirely under the control of the assistant treasurer.

Q. Who is he?

A. Mr. E. A. Hornbeck.

215 Q. Is it not under your general supervision as general manager?

A. It is not, except by courtesy. We generally consult on all matters.

Mr. HAINES: That is all for the present.

By Mr. WORKS:

Q. With respect to pipe line No. 2, you have given the number of acres of land not owned by the company irrigated directly from that pipe line. What service does this pipe line render, if any, in the way of supplying other lands of the system, not connected directly with the pipe line itself?

A. It furnishes a supply to a very large part of the distributing system that is classed upon our books as pipe line No. 1, and in that way serves a large area of land.

Q. You have been asked in reference to a tunnel that was driven at the time, or immediately after the time, that the water was let out from the reservoir in order to uncover the lands of Mr. Neale. What service does that tunnel render, if any, as a permanent part of the dam itself?

A. It now is used as an outlet to supply water to pipe line No. 2, also as a permanent wasteway in case of floods.

Q. Is it a necessary part of the system independently of the purpose for which it was originally constructed in connection with the uncovering of the Neale land?

A. We consider it a very necessary part of our system.

By Mr. HAINES:

Q. How high is the outlet of this tunnel above the outlet of pipe line No. 1: if any?

A. It is about 24 feet higher.

Q. How long is it since the height of the water in the reservoir has been such that pipe line No. 2 could be used?

216 A. Pipe line No. 2 has been used until the water was withdrawn about ten days ago.

Q. Has the water fallen 24 feet in ten days?

A. It has not. I might explain that there is another means of supplying pipe line No. 2, another connection with one of the smaller pipes that come through the dam.

Q. So that the tunnel has not been used within ten day- for the delivery of water?

A. It has not been used within some months I believe.

Q. Now does this pipe line No. 2 reinforce the system in Chula Vista, and if so, how?

A. If we did not have pipe line No. 2 the large main leading to National City would be called upon to furnish the water for National City, ex-mission, Paradise valley, and lands in Sweetwater valley. By relieving the large main of this large service pipe line No. 2 reinforces the distributing system of Chula Vista.

Q. Was not one of the great motives in bu-lding pipe line No. 2 to reach some lands on a high level along its course, both within and without National City?

A. That was not the great motive. The use of water from the system as originally constructed has become so great that there were lands that we furnished water that were receiving an inadequate supply from the old main.

Q. Where were those lands situated?

A. They were situated in Paradise valley, in National City, in the ex-mission.

Q. Paradise valley is in National City, is it not?

A. A portion of it is.

Q. Should there be no sufficient rainfal- to furnish water
217 in this reservoir, as the system now stands is there any way in which the system could furnish water to consumers for either domestic or irrigation purposes—as it now stands, I say?

A. As it now stands, without any development of any kind, and without a sufficient rainfall, water could not be furnished.

Q. Has the company made any plans for meeting the exigency in case no water is collected in the reservoir from rainfall?

A. No definite plans.

Q. Does it propose to take any action in such an exigency?

A. It does propose to take some action.

Q. In what direction, in what way?

A. If some arrangement can be made for the users of water to take it and pay for it at a reasonable price, considering the expenditures that would be necessary to develop water, it would put in some works to develop additional water.

Q. In what way?

A. *N*y means of pumps and flumes largely.

Q. Does the company propose to add these additional facilities for developing water without a previous arrangement with the consumers?

A. No definite decision is made as to that. As outlined to you, the general plan so far as we have gone is to arrange a basis of compensation for the water developed.

Q. Is that proposed plan within or outside of the litigation in this case?

A. I don't know that I fully understond your meaning. It does not depend, so far as I know, upon the outcome of this litigation.

Q. Would the company develop water by pumping and turn it into the mains at any rates either now existing by ordinance, or which the company demanded about January 1 1896?

A. I am not authorized to speak as for that. My opinion
218 is that pumped water could not be furnished for any such rates.

Q. Have you arrived at any estimate of what the rate ought to be in case the company does pump water?

A. I have not.

Q. Will the company develop water by pumping, without having first made an agreement with the consumers as to the subject of the rate for such water?

A. I can't say; I do not know.

Q. Do you favor the development of water without agreement in advance?

A. I do not. You understand I am speaking for myself and not for the company.

H. N. SAVAGE, recalled, testifies as follows:

By Mr. WORKS:

Q. I repeat the question I formerly put to you: How much of the entire system of pipes will, in your judgement, be destroyed and have to be replaced within ten years?

Mr. HAINES: That is a prospective question, as I understand. We object to this as going beyond the scope involved in this cause in the fixing of rates, inasmuch as the question presented was, how much would have to be replaced within a year, it being open to the corporation to make application to the board of supervisors at any time to meet exigencies for the future.

A. It is impossible to determine with any degree of accuracy just the operating life of pipe lines now in operation. As stated yesterday, in my opinion, from ten to twenty years is the reasonable limits, and while some of this pipe has become useless in
219 much less than ten years, as was stated yesterday, portions of it will probably be useful in a somewhat longer period than twenty years. As an approximate estimate I am of the opinion that from three-fourths up will have to be replaced within twenty years of its first construction.

Q. This applies to ten years.

A. The question as answered applies to the next ten years inclusive of the last ten.

Q. You were asked yesterday to give an estimate of the cost of replacing the sections of pipe that have already been replaced in the system, and took time to make the necessary investigation for that purpose. Will you now state the result of your investigation, and what the replacement of these different sections of the pipe line cost the company?

A. The long period during which these replacements have been made has made the work practically impossible in the time given, but a close estimate would be from thirty-five to forty thousand dollars of cost to this company for replacing that portion of the defective

pipe line that it has replaced. A considerable portion of the defective pipe line has not been replaced as yet.

By Mr. HAINES—Cross-examination:

Q. When you say "cost to this company" do you mean the San Diego Land and Town Company of Maine, or the San Diego Land and Town Company of Kansas?

A. Both.

Q. What amount of money do you estimate was the aggregate since the original construction of the system?

A. Thirty-five to forty thousand dollars.

Q. How much of that was the Fourth Avenue line of 24-inch steel pipe on Chula Vista which replaced the spiral pipe found useless?

A. Probably about $11,000.

220 Q. Does that include the amount paid for the pipe, including the expense of laying it?

A. It does—yes sir.

Q. That was in 1895?

A. It was.

Q. What other pipe was laid in 1895—replaced in 1895? Any pipe up in Sweetwater cañon leading directly from the dam?

A. There was some extensive repairs made of pipe destroyed and injured by flood that was not included in this estimate.

Q. Where was this remaining pipe replaced?

A. There was one mile of pipe replaced on Fourth avenue, between First street and Fifth street, an extension of the 24-inch line.

Q. At what expense? Can you give the diameter of that pipe?

A. 12-inch diameter. I estimate about $14,000.

Q. Did this replace some spiral pipe?

A. It did.

Q. That spiral pipe also proved worthless, did it?

A. That spiral pipe, as I understand from hearsay, was repaired and relaid in the ex-mission, and is in service there now.

Q. What other pipe was replaced since the construction of the system?

A. There was a quarter of a mile on Fifth street extending west from the southern terminus of this last-named 12-inch line.

Q. What sized pipe?

A. 12-inch.

Q. What kind of pipe did that replace?

A. That replaced spiral pipe.

Q. Why was the spiral pipe taken up?

A. Because of its defectiveness in operation.

Q. At what expense?

221 A. Was it taken up?

Q. Was it replaced?

A. Probably about $3,500.

Q. And what other pipe was replaced?

A. Quarter of a mile of 8-inch pipe on Fifth street west from the west terminus of this last-named quarter of a mile.

Q. What sort of pipe did that replace?
A. Spiral pipe.
Q. Why?
A. Because of the defectiveness of the spiral pipe in operation.
Q. At what expense?
A. These expenses given are as close estimates as I can reach, and I estimate this cost about $1,250.
Q. What other replacements were made?
A. One-quarter of a mile of 6-inch-diameter pipe from the west terminus of this last-named 8-inch pipe west, for the same reason that the other was replaced—defective spiral pipe in operation.
Q. At what expense?
A. Probably about $1,000.
Q. And where else was any replaced?
A. I am not positive, but I think the next ¼ mile west from this was replaced very early in the operation of the system, for a similar reason.
Q. Before you came here?
A. Before I came here. That would also be 8-inch pipe.
Q. What is the probable cost of that?
A. That would be somewhat more, because it was of a different class of 8-inch pipe—in round numbers, about $2,000.

By Mr. WORKS:

Q. What do you mean by its being a different class of pipe?
222 A. The 6-inch pipe and 8-inch pipe used in the past two described cases were known as casing pipe and purchased recently; while this 8-inch pipe last estimated on was calamine tube pipe and purchased at the time the pipe in the original system was laid and was much more expensive.
Q. The two last cases before, were they part of that spiral pipe?
A. They were not. The pipe replaced was spiral pipe; the pipe used was first-class pipe purchased here in 1893 and 1895.

By Mr. HAINES:

Q. Where was the next replacement?
A. There was also 2200 feet of 12-inch pipe that was purchased and laid on Fourth avenue, Chula Vista, and taken up when the 24-inch line was laid and the 12-inch was laid in various sections throughout the pipe line extending to ex-mission.
Q. At what expense was that?
A. The cost of the pipe, of the last laying, was probably something like $3,300.
Q. This last 2200 feet is not properly replacement of defective pipe, is it?
A. Yes, it is definitely replacement of defective pipe. It was used first in Chula Vista as a temporary pipe pending the replacement of defective pipe; and then it was, when taken from there, introduced into the main leading to ex-mission, in the fall of 1895, to replace defective pipe that had been in operation supplying and delivering water to ex-mission for some six years.

Q. That is, spiral pipe that had been moved over there?
A. Spiral pipe that had been moved there.
Q. So that spiral pipe was put down twice before it was finally condemned?
223 A. It was.
Q. When was the next replacement made?
A. As I recollect it at this time, that covers substantially all of the longer lines of replacement.
Q. In what year was the last of the replacements made that you have mentioned?
A. There is a replacement of 550 feet on E street Chula Vista that escaped description.
Q. I withdraw the question I put, then, until later.
A. That was made in the winter and spring of the present year.
Q. That replaced what?
A. Spiral pipe that had been in constant operation under pressure for ten consecutive years.
Q. At very great expense for repairs?
A. At large expense for repairs.
Q. What is the cost of this replacement?
A. Probably about $1400.
Q. Now when were all the replacements you have mentioned except this last one named?
A. They were made at various times throughout the operation of the system. The oldest one was probably made previous to 1891, and the others at varying intervals since up to an- including the last extensive one, which was made in the spring of the present year.
Q. You allude to this 550 feet?
A. Yes sir.
Q. And all these replacements seem to have become necessary by the fact that the original pipe was this spiral pipe—is that true?
A. The large replacements new made have all of them been of that class, and for that reason; there has been throughout
224 the system frequent small replacements of individual sections, or a number of sections, due to the wearing out of first-class pipe.
Q. Were not all of these replacements, except the 550 feet you speak of, made as early as 1895, and some prior?
A. The 24-inch line was made in the summer of 1895; the 12-inch line, a portion of it was made previous to 1890, and the balance of it was made in the winter and spring of 1895 and '96; one of the 8-inch lines was made previous to 1891, the other one was made in 1895; and the 6-inch line was made in 1893 or 1894, 1893 I think. The 12-inch replacement in the ex-mission line was made in the winter of 1895–'6.
Q. Do you know what the original cost, laid, was of all this spiral pipe you have mentioned?
A. As I recall, it was estimated to be between $57,000 and $58,000.
Q. Now in this Land and Town Company's Exhibit No. 1, when the cost of pipe line outside of National City is stated, does that

amount given include both the cost of the original spiral pipe and of the replacements?

A. I believe it does.

Q. Is it true that in stating the cost of pipe lines generally every rejected piece of pipe is included?

A. I don't understand it is true at all. I understand that no rejected pipe is included in that estimate.

Q. Are you sure of that, Mr. Savage?

A. I believe that is so.

Q. Have you got a statement from the books of the company showing what amount of rejected pipe, that is, pipe that had been laid, taken up, and rejected, was excluded from the estimate of the cost of the system?

A. I don't recall that any of the pipe was rejected, in the first place, but there was pipe laid, and undoubtedly charged up to the system that was afterwards condemned and replaced or dis-
225 carded.

Q. Is the cost of the pipe you have just mentioned included in this estimate?

A. Of this spiral pipe that was used and found defective and abandoned?

Q. Your answer may apply to that?

A. I understand it is.

Q. Do you know whether there is an account opened in the books of the company in which is stated as a deduction from the cost of this pipe line any pipe that had been laid and afterwards replaced because defective?

A. I don't recall whether the books of the company show any such thing or not.

Q. Did I understand you correctly a moment ago to state that there was not included in the estimate of $442,797.63, cost of pipe line outside of National City, any pipe which had been laid and rejected because defective?

Mr. WORKS: That is not an estimate.

Q. From the statement, then?

A. I understand that all of this spiral pipe was included in that statement referred to. In answering the previous question it was with the understanding that it referred to pipe that had been received and paid for and rejected without using.

Q. If the same method were followed, and if the whole pipe line were to wear out at the rate of six per cent. per annum, and were replaced at the end of the lifetime of the pipe as originally laid, the company would get upon its books the cost of two pipe lines, would it not?

A. It would—yes, sir—please read the question again.

Q. (Read.)

A. Yes—that is right.

Q. Did you have a personal participation in making out this statement, Land and Town Company's Exhibit No. 1? (Shows witness paper.)

226 A. I must have furnished some of the figures contained therein.

Q. If the same method were followed, if the first replaced system had laid for its lifetime, the books would then show the cost of three pipe lines, would they not, provided it were then replaced?

A. Do you refer to the first pipe line replaced, or the first replacing pipe line?

Q. I mean to ask if, after the original pipe line is worn out, and the first replacement is worn out, and the third pipe line is put in, and you follow the same method, whether your books would show the cost of three pipe lines aggregated?

A. They would.

Q. Did you furnish, or aid in furnishing, to the board of supervisors estimates of the cost of the pipe lines based on this method, for the purpose of obtaining six per cent. or any other nett revenue upon the whole amount?

A. The statement furnished, as I recall, had provision for depreciation of pipe line, and for an income on the investment.

Q. On the investment as stated in the statement?

A. Yes sir.

Q. And six per cent. upon the whole aggregated cost furnished according to this method as an annual demand?

A. I so understand it.

Mr. HAINES: I guess that is all.

Mr. WORKS: Before I close my part of the case I have concluded I would like to get in some of these figures. I will put this in. The complainant now offers it in evidence as its Exhibit No. 1, and being Land and Town Company's Exhibit No. 1 in the proceeding before the board of supervisors, and being an account of maintenance of Sweetwater dam, pipe lines, and water department expense,
227 including cost of water system to August 1 1897.

Mr. HAINES: The defendant object to the document offered as Complainant's Exhibit No. 1, on the ground that the same is not proved or verified by the oath of any witness in this proceeding, and is hearsay and incompetent, and does not purport to be a record or transcript of any original entries respecting the matters to which it purports to be related.

Mr. WORKS: In connection with this objection I desire to have Mr. Haines sworn.

A. HAINES, a witness called on behalf of complainant, being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. You are acting in this case for Mr. Sweet, the attorney of record in the case for the defendants?

A. I am.

Q. You are aware of the fact, are you not, that a stipulation was entered into between the parties that all evidence used before the board of supervisors should be used on the trial of this case?

A. I have reason to believe a stipulation was entered into. I did not see the stipulation after it was signed, and I am perfectly content with the terms of the stipulation as they are actually made.

Q. Did you not see the stipulation before it was signed, and make corrections in it in your own handwriting?

A. I did see a proposed stipulation which Mr. Sweet showed me, and I made a suggestion to Mr. Sweet, may possibly have made memeranda in my own hand. I have no desire to avoid the stipulation here; whatever it is we will stand by it.

228 Q. Do you not know that Exhibit No. 1, to which you have made objection, and Exhibit No. 2 which I am about to offer here, were part of the evidence used on the trial before the board of supervisors and included in that stipulation?

A. I believe they were part of the evidence before the board of supervisors, and I believe that the stipulation applies to all the evidence taken before the board.

229 *Maintenance of Sweetwater Dam Pipe Line and Expenses.*

Year.	General.	Legal.	Office.	Water dep't.
Year ending 1888.....	1895.24	1000.	1500	1156.07
" 1889.....	7122.78	2500	1500	1762.67
" 1890.....	6300.53	2500	1500	1690.43
" 1891.....	9377.12	2500	1500	3393.02
" 1892.....	8052.78	2500	1500	2628.61
" 1893.....	8496.57	2500	1500	2913.91
" 1894.....	5224.83	2500	1500	2645.06
" 1895.....	29147.62	1200	1500	3386.54
" 1896.....	5000.71	1200	2000	3303.02
To August 1st 1897 ...	2540.74	991.62	1166.66	2426.90
Estimate to 12/31/97..	1162.40	500.	833.33	1000.
	84330.32	19891.62	15999.99	26306.23

230 *Water Department Expense.*

Taxes.	Interest.	Insurance.	Depreciation.				Water rents.
			S. W. dam and reservoir.	Pipe line No. 1.	Pipe line No. 2.	Total.	
3441.67	9625	24 50	.....	.....	.....	18642.48	3991.31
5456.72	10500	24.50	.....	.....	.....	28866.67	11054.86
4303.19	10500	24.50	.....	.....	.....	26818.65	12679.05
2511.09	10500	24.50	.....	.....	.....	29805.73	17451.73
2250.98	10500	24.50	.....	.....	.....	27456.87	18907.10
3494.63	10500	24.50	.....	.....	.....	29429.61	22255.86
2810.16	10500	24.50	.....	.....	.....	25204.55	24564.67
3046.34	21000	7.50	.....	.....	.....	59288.	23839.03
3444.20	21000	7.50	5874.21	33337.96	4244.26	79411.86	29502.16
1635.33	12250	4.50	4625.32	19453.91	2475.27	47579.25	13196.18
1635.33	.....	3.50	3304.50	13895.65	1768.05	24102.76	9425.85
34029.64	126875	194.50	13804.03	66687.52	8487.58	396606.42	186867.80

231 *Cost of Water System August 1st, 1897.*

Sweetwater dam		237,165.05
" reservoir lands		159,290.76
Pipe line Nat'l City	183,753.90	
" " outside " "	442,797.63	
		626,551.53
Equipment		3,015.45
		1,026,022.79

232 Mr. WORKS: Complainant also offers as its Exhibit No. 2 account of water rents received from system from consumers in National City and outside of National City, and being Land and Town Company's Exhibit No. 2 before the board of supervisors, as follows:—

Mr. HAINES: I make the same objection to No. 2 as to No. 1.

Water Rents Received from System from Consumers in National City and Outside of National City.

	Total receipts.	National City.	Outside Nat'l City.
1888	3991.31	.....	.....
1889	11054.86	.....	.....
1890	12679.05	.....	.....
1891	17451.73	.....	.....
1892	18907.10	.....	.....
1893	22255.86	11037.66	11218.20
1894	24564.67	10715.29	13849.38
1895	23839.03	9342.04	14496.99
1896	29502.16	13162.03	16340.13
To Aug. 1, 1897	13196.18	6442.77	6753.41
	177441.95	50699.79	62658.11
Estimated to 12/31/97	9425.85	.....	.....
	186867.80	.....	.....

233 Mr. WORKS: We offer also, as Complainant's Exhibit No. 3 an account of the maintenance of Sweetwater dam, pipe lines, and water department expense, and including cost of water system to December 31, 1897, and being the same as Land and Town Company's Exhibit No. 1, used before the board of supervisors, except that instead of estimating the different items of cost and expense for the latter part of the year, as was done in that exhibit, the actual expense for the whole year of 1897 is given, and the footings changed accordingly.

Mr. HAINES: I make the same objection to No. 3 as to No. 1.

234 *Maintenance of Sweetwater Dam Pipe Lines—Water Expenses.*

Year ending—	General.	Legal.	Office.	W. dep't.	Taxes.	Interest.	Insur'ce.
1888	1895.24	1000	1500	1156.07	3441.67	9625	24.50
1889	7122.78	2500	1500	1762.67	5456.72	10500	24.50
1890	6300.53	2500	1500	1690.43	4303.19	10500	24.50
1891	9377.12	2500	1500	3393.02	2511.09	10500	24.50
1892	8052.78	2500	1500	2628.61	2250.98	10500	24.50
1893	8496.57	2500	1500	2913.91	3494.63	10500	24.50
1894	5224.83	2500	1500	2645.06	2810.16	10500	24.50
1895	29147.62	1200	1500	3386.54	3046.34	21000	7.50
1896	5000.71	1200	2000	3303.02	3444.20	21000	7.50
1897	5694.68	1200	2000	4199.45	3954.32	.....	7.50
	86312.86	19600	16000	27078.78	34713.30	114625	194.00

235 *Department Expense.*

Depreciation.				Water rights refunded.	Total.	Water rents.
S.W. dam.	Pipe line #1.	Pipe line #2.	Meters.			
.....	.....	.....	.....	.....	18642.48	3991.31
.....	.....	.....	.....	.....	28866.67	11054.86
.....	.....	.....	.....	.....	26818.65	12679.05
.....	.....	.....	.....	.....	29805.73	17451.73
.....	.....	.....	.....	.....	27456.87	18907.10
.....	.....	.....	.....	.....	29429.61	22255.86
.....	.....	.....	.....	.....	25204.55	24564.67
.....	.....	.....	.....	.....	59288.	23839.03
.....	.....	.....	.....	.....	79411.86	29502.16
5874.21	33337.96	4244.26	.....	.....	64592.26	27145.18
7929.12	33349.59	4243.49	242.05	1772.06		
13803.33	66687.55	8487.75	242.05	1772.06	389516.68	191390.95

236 *Cost of Water System December* 31, 1897.

Sweetwater dam.....		237165.05
" reservoir lands.....		159290.76
Pipe line National City.....	183753.90	
" " outside " "	442797.63	
		626551.53
Equipment.....		3015.45
		1026022.79

Mr. WORKS: We offer also, as Complainant's Exhibit No. 4, an account of water rents received from consumers in National City and outside of National City, and being the same as the Land and Town Company's Exhibit No. 2 before the board of supervisors, except that instead of estimating the amounts received from August 1 1897 to the end of the year, the actual receipts are given, as shown by the books of the company.

Mr. HAINES: And we make the same objection to No. 4 as to No. 1.

Water Rents Received from Consumers — National City and Outside of National City.

Year.	National City.	Outside National City.	Totals.
1888	.....	.....	3991.31
1889	.....	.....	11054.86
1890	.....	.....	12679.05
1891	.....	.....	17451.73
1892	.....	.....	18907.10
1893	11037.66	11218.20	22255.86
1894	10715.29	13849.38	24564.67
1895	9342.04	14496.99	23839.03
1896	13162.03	16340.13	29502.16
237 1897	11412.41	15732.77	27145.18
	55669.43	71637.47	191390.95

Def'ts reserve right to cross-examine on foregoing.

Mr. WORKS: In connection with the objections made to these several exhibits, we reserve the right to make further proof by examining Mr. Boal as to the correctness of the two last accounts offered. That is all the evidence we have to offer at the present time.

Hearing continued by consent until half past 10 o'clock tomorrow morning, December 16 1898.

238 SAN DIEGO, CAL., *December* 16, 1898—10.30 a. m.

THOMAS R. WILLIAMS, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. Thomas R. Williams.

Q. You live on a five-acre tract at Chula Vista under the system of the San Diego Land and Town Company, do you?

A. Yes sir.

Q. To what is this tract planted?

A. It is planted to oranges and lemons.

Q. When was it planted?

A. In 1887.

Q. In what condition were the trees upon this tract in the beginning of the year 1898?

A. They were in very bad condition.

Q. In the spring of 1898?

A. They were in very bad condition.
Q. Before the irrigation season began, I mean?
A. Yes sir—very bad condition; the leaves were very much wilted.
Q. I mean before the shortage of this water supply?
A. You mean this last spring, don't you?
Q. Yes. But I fix it in the beginning of the year before there was any shortage of water supply.
A. Oh, they were in good condition before the shortage of the water supply—yes sir.
Q. What kind of care had your orchard received?
A. The best care I knew how to give it.
239 Q. What were, in a general way, the crops yielded by your land last year?
A. We got about $1,200.
Q. For fruits?
A. For fruit—oranges and lemons—from the orchard.
Q. When did this shortage of water supply begin to affect you?
A. It began to affect us last winter, along perhaps in December.
Mr. WORKS: Do you mean in 1897?
WITNESS: Yes sir.
Q. Had you had what water in the fall of 1897 you needed for irrigation from the system? When did this shortage begin?
A. It began in 1897, in the fall of 1897.
Q. Had there been any restriction on you in using water before the spring of 1898?
A. No. We had last fall—if you will allow me to go on—we had last fall, about the middle of October, quite a good rain, and of course after that the rains were very slight, and we ought to have irrigated, but didn't, from the fact that we were expecting the rains to come, which left our orchard in the winter time, we will say, in December, and in January and February of this year, in a dry condition, very dry condition, so that the leaves were very much wilted, so much so that some of the trees, many of the trees lost, I would say, sixty per cent. of their leaves.
Q. When did that occur? Did that occur prior to the time when you were notified not to use water for irrigation?
A. No—partly——
Q. Do you recollect when it was you commenced to use water during the season of 1898?
A. We commenced—I commenced—the lemon trees—shall I explain?
240 Q. I would like to have your answer as pointedly as possible. I want to know when you commenced using water in the spring of 1898 for irrigation?
A. We commenced to use water for irrigation in the month of May.
Q. What part of the month of May?
A. I could not tell just what time, but along perhaps about the fore part of May, I should say.
Q. Did you get a meter by that time?
A. No sir. I don't remember when we got our meter. I com-

menced to spray the trees with water; we had a heavy crop of oranges on our ornage trees, and they were dropping very much, and very wilty, so that the parties I contracted to sell them to——

Q. I don't want to go into those details. I merely want to know the condition of the trees, and when you commenced to irrigate?

A. I commenced to irrigate in May.

Q. You sprinkled them, sprayed them?

A. I commenced to spray them, and I was stopped by Mr. Savage. He came and prevented me from doing it.

Q. Then did you irrigate any until you got meters?

A. I did not.

Q. Now did you sign the apportionment agreement for water, made between the compnay and the consumers?

A. I think I did.

Q. Did you hold off irrigation then until meters came after that?

A. I did.

Q. When was that, that you commenced?

A. Some time in May; I don't remember the day. It seems to me it was the fore part of May some time, but I can't tell distinctly about that; I can't recall.

Q. Had you used any water from the system up to the time you say you commenced sprinkling and were stopped by Mr. Savage?

A. I had not.

241 Q. What effect did the shortage of supply have on your trees and crops during the summer of 1898?

Mr. WORKS: The complainant objects to the testimony, on the ground that it is immaterial irrelevant and incompetent, and has no bearing upon any issue presented in this case.

A. It greatly damaged the trees, and practically has ruined the crop.

Q. What effect will this shortage of supply have upon the coming crop for the next year?

A. I think that we shall have no crop next year. Our trees have shed their leaves that I think—and they have received such a shock—they are dying, very many of the trees, the orange trees especially, branches after branches died on account of the lack of water, not having sap to throw up above; and the tops are dead, perhaps a third of the way down, on a very many of the oranges, and I think there will be no bloom, I don't think we will get any bloom.

Q. Do you recollect whether you received a notice about September 28 1898 from the company to stop irrigation?

A. I do.

Q. Did you stop?

A. I did.

Q. What effect did that have upon your trees and crops?

A. It made the trees very wilty, and they shed a great many of their leaves, and they are dying and the fruit is ruined; it has not matured.

ELISHA M. GAVIN, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies
242 as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. Elisha M. Gavin.
Q. Have you a tract of five acres under this Sweetwater system, at Chula Vista?
A. Yes sir.
Q. What is it planted to?
A. Half in oranges, and half in lemons.
Q. In what condition were your trees and orchard, say, January 1, 1898?

Mr. WORKS: It may be understood that all this line of testimony is objected to by us.
Mr. HAINES: Yes. I desire the same with respect to the line of testimony you entered upon, that I first made objection to, as applicable throughout.
Mr. WORKS: Yes sir.

A. They were in fair condition, I should say.
Q. What sort of care had your orchard had up to that time? and since?
A. I consider that my orchard has had as good care as any tract in Chula Vista.
Q. How old were the trees?
A. They were seven years old; eight years old in March.
Q. What effect has the shortage of water supply during the season of 1898 had upon your orchard and the crops?
A. On my oranges—it has just about ruined them; the lemons have not suffered so bad. My oranges, I won't get one-fifth
243 of a crop, and what I do get are so small that I can't get anything for them.
Q. Did the orchard set well in fruit in the early spring?
A. Yes sir. The trees were very well loaded with fruit, and if I had had sufficient water later in the season there is no doubt I should have had as fine a crop of oranges as anybody in the country.
Q. Can you make an estimate of the amount of loss on that five acres during this past season by reason of want of water?
A. I would say at least four-fifths of them are unfit for market, and the trees dying back considerably. I feel pretty sure there is at least $400 worth of oranges on the ground.
Q. Have you received demands of the company through the year for the water rates under the ordinance?
A. I have.
Q. Have you paid your water rates up to January 1st 1899?
A. I have.
Q. Have you had occasion to examine, or have you examined

orchards in other portions of Chula Vista than your own, and in that neighborhood?

A. Well, there is S. W. Haines' orange orchard I have noticed particularly, that is practically ruined. He got nothing off it this year, and I think he will get very little off it next year, in the condition of the trees. As to others, I would not say. I know there is a great many that have suffered fully as bad as I have, but I don't feel justified in mentioning any.

Q. You have made no particular examination of them?

A. No.

Q. Do you say the damage has been general or otherwise?

A. It has been general. There is any number of orchards suffered just as bad as I have, but I don't feel able to mention them, that is, I only know what I hear about others.

244 Q. Did you receive a notice from the company about the 28th of September to stop irrigation?

A. I did.

Mr. WORKS: There is no use taking up time to prove that fact. Mr. Boal has said that this notice was sent generally to all consumers.

Mr. HAINES: Then I will assume it.

Q. Did you stop irrigation then until about December 9?

A. I did.

Q. At which time it was decided that the irrigators could not be enjoined from using it—do you recollect that fact?

A. Yes sir.

Q. What was the effect upon the trees and crops, as far as you have observed, between the 28th of September and December, for want of water?

A. Of course they have showed the effect of the want of water more since then than any other time during the year, particularly the oranges.

Q. Why is that particularly true of oranges?

A. The oranges were carrying a year's crop of fruit, and required a great deal more water the latter part of the year, and the very time they should have had it there was no water to give them.

Q. Do you know what the fitness of this water was for domestic use, during the season of 1898, especially the latter part?

A. I know the water was not fit for domestic purposes; that is, I considered it not fit, as I carried all my water for such purposes in fact all the year—in fact I have carried domestic water all the year. My father-in-law has a cistern across the way, and I have been using that water. I have been using water for the stock out of a well I have on my place.

245 Q. Have you any knowledge as to how generally the people under the system on account of the quality of the water refrained from using it for domestic uses during the latter part of the summer of 1898?

A. I think there is very few that have used it for domestic purposes; in fact I know of quite a few that have been hauling it from Otay pumping works.

WILLIAM F. STEARNS, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. William F. Stearns.
Q. Where do you live?
A. Chula Vista.
Q. You are living on ten acres of land under this company's system?
A. Yes sir.
Q. Planted to trees?
A. Yes sir.
Q. Have you been engaged in the business of spraying orchards upon Chula Vista during the last summer?
A. I have—yes.
Q. And up to about this date?
A. To the present time—yes.
Q. You have had opportunity to observe the condition of the orchards by reason of shortage of water supply?
A. Yes sir.
246 Q. Under this system?
A. Yes sir.
Q. I wish you would give as brief a description as you can how the shortage of water affected the trees and the crops.
A. Well, the trees all had a good showing in the spring of the year; as the summer grew on with the shortage of water they dropped more or less, a great many holding off to save them in the fall if possible. Oranges suffered more than lemons; they died back considerable.
Q. Did the people commence irrigation as early in the spring as their trees demanded?
A. No; I don't think they did.
Q. Do you know why?
A. From the fact that they thought that it would be better to lose the fruit than the trees; that is, they considered it that way, those that I talked with, a good many; and where I sprayed the question would come up.
Q. Do you recollect the delay occasioned by waiting for meters
A. Yes sir.
Q. There was an apportionment agreement made between the people and the company, wasn't there?
A. Yes sir.
Q. In view of the reduced supply of water?
A. Yes sir.
Q. And in order to carry that out it was necessary to have meters?
A. Yes sir.
Q. And so the people arranged with the company to buy or rent meters?
A. Yes sir.

247 Q. And they had to wait until they came?
A. Yes sir.
Q. About what time were people enabled to commence irrigation under this agreement and by reason of waiting for these meters?
A. I don't just remember, but I think it was along in May, the latter part of May, I should judge, along there, I don't remember the exact time. It was in June before I irrigated, away into June. I know a good many orchards were suffering for want of meters; they were ready to use it, and they didn't irrigate on that account.
Q. Did irrigation generally stop after the company sent out these notices September 28?
A. Yes sir.
Q. What was the need of the trees and fruit for water at about that time?
A. They needed water bad then.
Q. Orange trees—were they maturing their fruit rapidly?
A. Maturing their fruit—had their full crop—maturing their fruit and needed water bad, much more so than lemons.
Q. We have had some description of the damage to orange trees. I would like some description by you of the damage to lemon crops and trees. You have sprayed them, and you can give some account of it.
A. I think the lemons dropped more or less of their fruit from the people's waiting to irrigate in the spring, right when they were blossoming and budding, and then they got more or less dry, and putting water on had a tendency to more or less drop them. If we had had water to irrigate about a month earlier I don't think the lemons would have suffered very much, that is, if we could have got to irrigating sooner than we did I don't think they would have dropped as much.
Q. What was the effect of stopping irrigating in September?
248 A. What fruit was on the trees it retarded its maturing, and a great many of them dropped; and a great many of them as I sprayed and where it would touch them they would shower off from the dryness.
Q. The lemons would shower off?
A. By touching it the lemons would drop, and they were dropping more or less all the while.
Q. Is the quality of the fruit that did remain upon the trees affected any?
A. I think it is—yes sir. It is not as far advanced as it should be at this time of year.
Q. What is your observation as to whether the water from that system, especially during the latter part of the year, from September on, was suitable for domestic uses?
A. No sir; it was not.
Q. Do you know how people supplied themselves with water for domestic uses during the season?
A. The majority of the people hauled it, in fact I guess all. Wherever I sprayed they had water either from the Sweetwater or

Otay wells. A great many bought water from peddlers. A great many hauled water in their own conveyances.

Q. Do you know whether people made any effort to supply themselves with water for irrigation by hauling?

A. Yes; that is, they did in the latter part, after they had notice to discontinue irrigating, this last notice.

Q. Where did they get this water?

A. They hauled it from the Sweetwater river.

Q. Pumped it there?

A. Pumped it there—yes sir.

Q. Hauled it in barrels and put it in round their trees?

A. Hauled it in barrels and put it round their trees.

249 Those that did haul it helped to save some of their orange trees, especially Palmer, he hauled all around his oranges, and I think saved a large portion of them by so doing.

Q. It is a very heavy expenditure, is it not, to haul water for irrigation?

A. It is quite an expenditure—yes sir. I was offered five dollars a day to haul.

Q. You say Mr. Palmer's oranges were largely saved by his hauling water?

A. I do. I think they were absolutely saved by hauling water, because he hauled continually, and he got them well wet, that is, from one to three barrels I should think to a tree—probably averaged two barrels to a tree, possibly more.

By Mr. WORKS—Cross-examination:

Q. What is the proportion of oranges on the tract as compared with the lemons, in acreage?

A. Well, the lemons is far ahead of the oranges.

Q. Could you give some idea about what the proportion is?

A. I should judge there was 70 per cent. lemons.

250 GEORGE DASCHBACH, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. George Daschbach.

Q. You are an owner of five acres of land under irrigation from the Sweetwater system?

A. I am.

Q. What is it planted to?

A. Principally lemons, a few oranges.

Q. Will you state what effect the shortage of water had upon the lemon trees of your tract?

A. Well, half of my tract—I started to irrigate all, and when I got through irrigating half of it they shut me off, and the half I didn't irrigate is practically ruined; there is no lemons at all on it.

Q. When was that? When this notice was sent out in September?

A. Yes sir—to quit using water.

Q. What kind of care do you give to your place?

A. Well, fair care I have taken—I did what *what* I thought was right, cultivated it and kept it in fair condition.

Q. Have you observed other lemon orchards under the system?

A. Not so much as my own of course, but I have observed them generally in passing.

Q. What is your observation about the effect of the shortage of water upon lemon trees?

A. I think it has caused a great deal of loss to the ranchers, considerable loss, both in lemons and oranges.

251 Q. What effect will it have upon the next year's crop, as far as you can observe?

A. This two acres and a half that I speak about—about half my ranch—there will be no crop on it to speak of. The front half will have a fair crop. Last November I picked 150 boxes; this November I picked thirty, with the year's added growth—of lemons.

Q. What is your observation as to whether the same results of shortage of water are general under the system?

A. I think they are, as far as I can observe, and as far as I have heard the people say, the ranchers say—about the same, I would judge.

Q. What has the quality of this water been for domestic uses?

A. I consider it unfit to use. I have carried my domestic water since last January from the Otay wells. Every week I took my rig and barrels, and supplied myself from there.

Q. Especially during the latter part of the summer, from September on, how has this water been for stock use?

A. My horse positively refused to drink it until I would keep it from him for a day, then he would drink it in a way; but I finally carried for him also; well, the last three months I have been hauling for him.

Q. Do you keep cows?

A. No cows, sir.

WILLIAM F. STEARNS, recalled, testifies:

By Mr. HAINES:

Q. Have you noticed any effect of the use of this water upon horses?

A. My horses, towards the latter part it seemed to scour
252 them a great deal whenever they would drink that water.

Q. Was the water alkaline?

A. Yes sir; I think there was a great deal of alkali in the water. They didn't drink but very little at a time, but what little they did drink seemed to have quite an effect on them that way; I noticed it run their bowels off quite sever-ly some days; and others seemed to have the same complaint.

Q. Was it quite general?

A. It was quite general where I was around spraying. They always seemed to speak of it— a general way.

JOHN E. BOAL, recalled, testifies:

By Mr. HAINES:

Q. There was entered into between the company and the consumers generally an agreement respecting the apportionment of water, which I produced here, was there not?

A. There was.

Q. It was signed by the company and consumers generally, was it?

A. I think so. It was signed by the company, and by many of the consumers.

Q. And it was the agreement that was carried out under the system during the season until the 28th of September 1898, was it not?

A. It is the agreement.

Q. And appended to the agreement is a form of contract respecting meters, which is signed by more or less of the consumers, is it not?

A. It is.

253 Q. Was irrigation held off until these meters were procured by the company?

A. It was held off so far as it was possible to hold the consumers off. Some used water before meters arrived, and the amount used was estimated, so far as could be done, and deducted from the amount delivered to them afterwards.

Q. Charged up to their apportionment, was it?

A. So far as we could estimate it, and so far as we knew of the use.

Q. About what time did irrigation begin under the apportionment agreement?

A. It began in a small way fairly early in the season, I should say in the latter part of April; and as meters could be had from the manufacturers the irrigation increased.

Q. When were the bulk of the consumers able to begin after having been supplied with meters?

A. I should say between the latter part of May and the middle of June the bulk were supplied.

Mr. HAINES: We offer in evidence the form of agreement for apportionment, and for purchase and hire of meters, except signatures.

Mr. WORKS: I think we would prefer to have the signatures there, so that it will show the number.

Mr. HAINES: There were quite a number sent around.

Mr. WORKS: The names, I suppose, ought to be taken from these papers and appended to one of the documents you want to introduce; there are eight or nine I believe.

Q. Mr. Boal, the consumers generally, under the system abided by this agreement, even though they did not sign it?

A. Generally they did.

Mr. HAINES: I don't see what utility there is in copying

254 those names.

Mr. WORKS: You have not fixed very definitely how many

proportionately—how many did either sign or conform to the agreement.

Q. Did any considerable number refuse to abide by this agreement, whether it had been signed by them or not?

A. No considerable number refused.

Mr. HAINES: I will read the exhibit offered by defendants as follows (reads):

"*Agreement.*

E. J. Swayne moved that the form of contract to be submitted to the consumers be as follows, and preceded by the agreement of the San Diego Land and Town Company, as follows:

The undersigned San Diego Land and Town Company of Maine agrees to the following apportionment of the water in accordance with the following apportionment adopted at the mass meeting of consumers at National City March 26th, 1898, and as consumers we agree to accept and take only our quantity as herein apportioned for the time and in the manner herein provided.

The undersigned consumers of water under the Sweetwater system, in view of the short visible supply impounded in the reservoir of the system for use the present season, hereby mutually agree to the following apportionment of the supply of water now in the reservoir for irrigation among the consumers; such apportionment to apply to water now impounded. Said apportionment is as follows:

To trees planted in 1897, 45,000 gals. per acre, which amounts to.....	2,430,000
To trees planted in 1896 60,000 gals. per acre, which amounts to.....	14,220,000
255 To trees planted in 1895 72,000 gals. per acre, which amounts to.....	46,584,000
To trees planted in 1894, 90,000 gals. per acre, which amounts to.....	33,210,000
To trees planted in 1893 110,000 gals. per acre, which amounts to.....	61,600,000
To trees planted in 1892 135,000 gals. per acre, which amounts to.....	94,095,000
To trees planted in 1891 170,000 gals. per acre, which amounts to.....	131,920,000
To trees planted in 1890 210,000 gals. per acre, which amount- to.....	275,100,000
	659,159,000

Vegetable gardens, nurseries, alfalfa, ornamental trees and lawns are to be counted as trees planted and receive the same apportionment of water according to trees planted in 1890.

In case of increase of supply the apportionment should be proportionately increased.

We hereby authorize the San Diego Land and Town Company during the season of 1898, to apportion the said water in accordance

with the above schedule and apportionment and to distribute to themselves, as consumers of water, the same proportion that would fall to the lot of any other consumer according to the class to which he belongs.

But it is expressly understood that by this agreement we waive no right as consumers or land-owners as between ourselves and the company, beyond granting the license to prorate water as above for the present season.

We further agree that the following committee of seven appointed pursuant to the action of the mass meeting held March 26th,
256 1898, to wit, R. C. Allen, L. E. Allen, L. W. Goff, D. K. Adams, E. Thelan, E. J. Swayne, and A. Haines be authorized to represent us in all matters connected with the foregoing agreement and to act as arbitrators in any dispute between consumers or with the company growing out of the same.

(2.)

THE SAN DIEGO LAND AND TOWN COMPANY,

By —— ——.

(Blank lines.)

(3.)

The undersigned agrees to purchase for himself or co-jointly with others, the meter or meters required to measure the water apportioned to his or their lands.

Name.	Number meters.	Size.

(Blank lines.)

The undersigned hereby applies for meter under ordinance governing same, and agrees that said meter may be available only during the time allotted for delivering the water apportioned.

Name.	Number meters.	Size.

(Blank lines.)

(4.)

The undersigned San Diego Land and Town Company agrees that users of water buying meters for the purpose of measuring their apportionment of water during 1898, shall not by such purchase and use of meters be obligated to continue the same after the present year, and that any one or more water-takers who rent meters
257 not over two inches in size from the company, representing an ownership of not less than forty (40) acres under irrigation, shall not be obliged to continue the use of meters after 1898.

Dated April 2d, 1898."

Q. All these writings were signed by the San Diego Land and Town Compnay as well as the consumers who did sign them?

A. They were.

C. A. WHITTEMORE, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. C. A. Whittemore.

Q. You are the owner of ten acres of land under the Sweetwater system?

A. Yes sir.

Q. To what is it planted?

A. Oranges and lemons.

Q. How old are the trees?

A. They were planted in 1890.

Q. What sort of care has your orchard had in the way of cultivation, fertilization, and the like?

A. A 1.

Q. What was the condition of your orchard prior to this shortage of water?

A. Excellent.

Q. What effect has this shortage of water had upon your
258 trees and the fruit?

A. Well, the oranges, I had a good crop of oranges last year, and I won't have one-tenth as many this year as I had last year I don't think. Many of the orange trees the leaves are nearly all off, and the ends of limbs are dying and I think some of the orange trees will hardly revive. The lemons that are on the trees many of them are worthless; they are shrivelled up and yellowed up, and very small and good for nothing. The leaves have dropped badly on the orange trees, and a good many on the lemons, and the lemon trees have shrivelled very much—the leaves.

Q. What has been the quality of this water for domestic purposes during the summer of 1898?

A. It has not been fit to use. I have got water from the Sweetwater, and the fore part of the time at the Otay. Since they have got the pump at the Sweetwater I have got it down there.

Q. Have you paid your water rents under this ordinance up to January 1 1899?
A. I have.
Q. Do you know of any refusal on the part of the people to pay this ordinance rate?
A. I do not.

By Mr. WORKS—Cross-examination:

Q. How are your water rates paid? Quarterly in advance?
A. Not always.
Q. Is that the rule?
A. Yes, that is the rule.
Q. They are not always paid quarterly in advance?
A. No.

259 JOHN CRELLIN, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. John Crellin.
Q. Have you the charge of any land under any part of the Sweetwater system, irrigated from it?
A. Yes sir.
Q. How many acres?
A. 30, in fact 40, but 30 under cultivation.
Q. To what is this thirty acres planted?
A. Lemons and oranges, apricots, and prunes, and a few figs.
Q. Can you tell what effect this shortage of water supply during the season of 1898 had upon this ranch and its fruit and trees?
A. Well, it had considerable effect. It is showing it plain now. It is hard for me to make an estimate of what the loss will be.
Q. Describe the effect on the trees and fruit?
A. Well, when we were waiting for meters—and we were about the last that got them, because they hadn't the proper size to fit our pipes, and the trees were in bad shape—I went several times to try to find when the meter was coming——
Q. Went to the company?
A. Yes sir. I bought the meter of them. And the place suffered greatly. And after we got water there was a little pressure, and the pipes burst almost every day, so that we didn't get any, very little, they were shut up two or three days at a time. And the
260 ranch is kind of sidling—I suppose that is our misfortune—and we could not get pressure to get it through; we didn't water four rows on the side hill; there was six or seven acres that we didn't water twice last summer; we hadn't the pressure to get there. We were out nights, and carried it with pails to keep them alive.
Q. Now give a general description of the effect on the whole orchard of this shortage of water supply.

A. The effect on the lemons is that when we got water the bloom fell off And they set some, but when we got a little water they didn't mature, at least they didn't come to any size, and got yellow right away and fell off. You could take them and shake them on the ground. There are millions on the ground, round each tree a ring of little yellow lemons on the ground now this morning. The oranges—there are a great many small ones. Last year we had a good crop. I sold 1250 boxes; this year I won't have six.

Mr. WORKS: Do you mean six or **six** hundred?

WITNESS: Six hundred. And not half a crop of lemons. They are on the trees, hanging there, and if you touch the tree they will fall off. They are round there on the ground now.

Q. What effect will this shortage have upon the next year's crop upon these trees?

A. I don't see that there is going to be a crop. Our trees—the lemons is not blooming yet, and it is generally, I understand, that they bloom most of the year; but there is none on our trees now, therefore there can't be no crop next year, because it takes a good many months to make a lemon. And as far as water is concerned, we have got none now; and they are supposed to give us water for domestic use, and we have none in the house now.

(Recess.)

261 JOHN E. BOAL, recalled, testifies as follows:

By Mr. HAINES:

Q. Has your company, within the last ten days, been turning off the taps of all consumers who hadn't paid the ordinance rate up to January 1 1899?

A. Not all. There have been some consumers who have been delinquent for greater or less length of time, and we have been notifying them to pay up the delinquencies, and in some cases have turned them off when they have not responded.

Q. The compnay is enforcing the payment of rentals up to January 1 1899, is it not?

A. It is endeavoring to collect to that date, but those who have been turned off have been delinquent for some considerable time in the past.

Q. Is it endeavoring to collect by turning off such water as there is in the pipes—I mean to collect up to January 1 1899, by turning off such water as there is in the pipes?

A. I mean to say that no consumer, to my knowledge, has been turned off because his rental is not paid to December 31 1898 but because of delinquency running back through several months in some cases.

Q. Does the company, or will it, turn on the taps turned off unless rentals are paid up to January 1 1899?

A. I don't know positively what the compnay will do as to that.

Q. When will the compnay find out what it will do?

A. We will consider the matter and probably take counsel of our attorneys before we decide.

By Mr. WORKS:

Q. Is it not true that all of these consumers are behind with their rentals for more than two years, according to the decision
262 rendered in the case of Lanning against Osborne?

A. I understand that many of the consumers, if not all, outside of National City, are delinquent for the rates above $3.50 between January 1 1896 and about October or November 15 1897.

By Mr. HAINES:

Q, You speak of arrears on increase of rentals from $3.50 to $7.00, do you?

A. In many cases it would be $7.00, perhaps all.

Q. Is this the ground upon which you are turning off any of this water?

A. It is not.

FRANK PALMER, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. Frank Palmer.

Q. Do you *won* 20 acres of land under the Sweetwater system?

A. Yes, sir.

Q. To what is it planted?

A. Oranges and lemons.

Q. How many of each?

A. Five acres in oranges, and about 15 of lemons. There are a few deciduous trees.

Q. Will you state how old the trees are?

A. Six years old.

Q. What kind of care has this orchard received?

263 A. It has had the best care I could give it; it has been cultivated and manured; there is not a weed in it; the trees have been hoed around and worked all summer.

Q. What effect did the shortage of water supply have upon the trees and their fruitage during the season of 1898?

A. It didn't have any bad effect until soon after they turned the water off, that is, nothing material; of course they would have done better probably if they had had more water.

Q. Was the water turned off about September?

A. Yes sir.

Q. Latter part of September 1898?

A. Yes sir.

Q. What was the effect then?

A. The lemons quit growing, and the oranges began to turn yellow and fall off, and the lemons died back.

Q. What did you do, if anything, to arrest the bad effects upon your oranges?

A. Drawing water in barrels.

Q. What effect did the application of water have upon the trees?

A. It revived them right away, and they quit dropping.
Q. Has Mr. Collier a ten-acre orchard adjoining you?
A. Yes.
Q. Same sort of soil?
A. Yes sir; it is just the same, as near as I can see.
Q. What sort of care did Mr. Collier give to his orchard?
A. He gave it good care, except he has not manured it the way I have mine; that is the only difference.
Q. Did he haul any water for his trees?
A. No sir.

Q. What is the effect of shortage of water on his trees?
264 A. He has lost his orange crop, that is, they are too small to sell; and a good many drop off.
Q. What has been the effect on the lemon trees?
A. The lemon trees, a good many of the leaves went off, and they all curled up, and the fruit was soft.
Q. How general is this condition of things under the system?
A. Those that didn't water until the very last minute suffered worse than those that did.
Q. The last minute before they shut the water down?
A. Before they shut the water down.
Q. In September?
A. Yes sir.
Q. What about the suitability of this water for domestic use in the season of 1898?
A. I have not used it in the house since some time in June—could not use it. I got my supply elsewhere?

By Mr. WORKS—Cross-examination:

Q. What do you mean by domestic use? For drinking purposes?
A. For drinking, cooking, and so on. We watered the horses out of the same system.
Q. You used it for other purposes about the house too, besides drinking and cooking, didn't you?
A. We used it for washing by cleansing it; we could not in any other way.

S. W. HAINES, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

265 Q. What is your name?
A. S. W. Haines.
Q. Have you a tract of land under the Sweetwater system?
A. Yes.
Q. How many acres?
A. Fifteen.
Q. What is it planted to?
A. Lemons and oranges.
Q. How many acres of each?

A. About three acres of oranges, the balance lemons, all except a few deciduous trees.

Q. Are you connected with the fruit exchange of Chula Vista?

A. Yes, sir.

Q. How old are the trees on your place?

A. I believe the orchard was set in 1890–'91.

Q. What sort of care has the orchard had up to this time?

A. Good care.

Q. Can you state what effect, if any, the lack of water during the season of 1898 has upon the fruit and trees in your orchard?

A. Why, I believe it is the lack of water that has caused the loss of my orange crop. My oranges for the past two or three years have returned me from three to four hundred boxes. This year I will not have to exceed (40) boxes of merchantable fruit.

And as far as the lemons are concerned I can't tell how much the loss is, but there is very much less blossom and less small lemons on the trees now than there were a year ago at this time; I should say that there was not to exceed fifty per cent. of what there was a year ago of the blossoms and small fruit.

Q. What effect upon the trees themselves, the oranges and lemons?

266 A. The orange trees have died back in the tops. A great many of them are—well, I should judge a great many of them would not yield any fruit at all another year, that is, of the orange trees. The lemon trees have not shown the die-back like the orange.

Q. How do you account for the difference between the orange and lemon trees in that respect?

A. Well, the orange tree has the fruit for the entire year at one time, requiring in the fall of the year all the nourishment it is possible to get in order to keep it going, while the lemon tree is bearing continuously, and not carrying so much fruit at one time.

Q. What was the effect of the shutting off of the limited supply of water apportioned in September, the latter part of September, 1898?

A. That was the time I suffered the greatest loss. My trees were in fairly good condition up to that time, but I held back as much water as I thought I could to put on in October, and it so happened the last irrigation I started in with my oranges, and the last irrigation they received was in the fore part of September, while the lemon trees were irrigated ten days later. The reason for that is simply I have to use one pipe, and I start from one side of the orchard and go across.

Q. Have you paid your rentals up to January 1, 1899?

A. Yes.

Q. Did you govern yourself by the apportionment of water under the agreement made between the company and the consumers?

A. Up until the time of the injunction suit do you mean?

Q. Yes.

A. Yes sir; it all run through meters.

267 Q. And you say you had reserved a portion of your apportioned water when the water was shut off or you were directed to stop using upon September 28th, 1898?

A. Yes sir. I had over one-fourth of my water left, I believe, of my proportion.

Q. How did the people govern themselves in ascertaining their supply of water that they were using? By meters?

A. Yes.

Q. Which they bought or rented from the company?

A. Yes sir.

Q. Was this expense incurred for the first time during the season of 1898?

A. The use of meters?

Q. Yes sir, under the system?

A. That is the first time I ever had the expense.

Q. From your knowledge of the system was that the first general use of meters under the system?

A. Yes sir. I never heard of it before as a general use.

Q. What is the general cost of these meters?

A. I bought a half interest in one, and paid $22.50.

Q. To the company?

A. Yes sir.

Q. The consumers tried to lessen the expense by dividing the use of a meter, or buying it in common?

A. Yes sir. Also in order, in my case, to have the meter whenever I desired it, I only had one partner in it.

Q. In some cases there were more joint owners in a meter?

A. Yes sir.

Q. In some cases as many as four?

A. Yes sir.

A. They used it in rotation?

268 A. Yes sir.

Q. All this additional expense was caused this year by the shortage of water, was it?

A. It was so understood by me—yes sir.

Q. How general throughout the system, from your knowledge as a receiver of fruit at the packing-house, was this same kind of injury by reason of short water supply?

A. In all cases of the members of the same association there has been a loss from the short water supply, except one, Mr. Root, above the dam, cut off his fruit and lost it in that way.

Q. Do you know Mr. Gulick?

A. Yes sir.

Q. Henry Gulick, Jr.?

A. Yes sir.

Q. Do you know what course he took with his grape fruit in order to save his trees?

A. I saw it lying on the ground under the trees. He told me—

Mr. WORKS: That is objected to.

Q. From your knowledge is the same damage general throughout the system?

A. As Mr. Gulick's do you mean?

Q. No: as in your case? So far as your observation has gone?

A. So far as my observation has gone I think that it is the same with outsiders.

Q. Outside of members of the association?

A. Outside of members of the association.

Q. What can you say about the fitness of this water for domestic use and for families?

A. We discontinued the use of it entirely for house use about
269 six weeks ago. It was so unpleasant to have in the house on account of the odor, and it was very unpleasant to use on account of the alkali in it.

Q. Have you used it for your animals?

A. Yes sir, up to about three weeks ago.

Q. Since that time have you stopped using for them?

A. Yes.

Q. Why?

A. My cow gave such very bad milk we were unable to make any butter, and it seemed to scour my horses pretty bad.

(No cross-examination.)

It is hereby stipulated that the further taking of testimony in this case may be continued indefinitely, the time for the further taking to be fixed by the special examiner, with the consent of both parties.

And it is further stipulated that the time within which the testimony may be taken, on the part of both or either of the parties hereto, is enlarged for ninety days.

The further taking of testimony is hereby adjourned by the special examiner, in accordance with the above stipulation.

270 OFFICE OF WORKS & WORKS,
SAN DIEGO, CALIFORNIA, *June* 14, 1899—9 o'clock a. m.

Upon due notice by the special examiner to counsel for the respective parties, and pursuant to stipulation the taking of testimony in said matter was at above time and place resumed; and all parties being present, the further taking of same was continued until 2 o'clock p. m. of said date.

2 O'CLOCK P. M.

JOHN E. BOAL, recalled, testifies as follows:

By Mr. WORKS:

Q. You are familiar, I believe, with the manner of planting trees in Chula Vista, under the system of the land and town company?

A. I am.

Q. How many trees are planted to the acre?

A. As a rule they are set 24 feet apart each way, which would make at the rate of 76 and a fraction per acre. This rule is sometimes varied from, but not to any great extent.

Q. Calculating the number at 70 to the acre, what would be the cost per tree for irrigating at the rate fixed by the board of supervisors, $3.50 an acre per annum?

A. Assuming that they used the 350,000 gallons per acre, each

tree would receive 5,000 gallons, and at one cent per thousand gallons the cost would be five cents per tree; and at two cents per thousand gallons, the cost would be ten cents per tree.

Q. One cent per thousand gallons is the amount fixed by the ordinance in question in this case, is it not?

A. It is.

271 Q. Then under the ordinance the cost per tree annually for irrigation would be five cents?

A. It would.

By Mr. HAINES—Cross-examination:

Q. During the second year after the enactment of this ordinance has your company been able to furnish any water for irrigation of trees from the reservoir of the company?

A. We furnished a very small quantity of water from the reservoir during the spring of the year 1899.

Q. About how much?

A. 10,000 gallons per acre.

Q. Did that exhaust the supply stored in the reservoir?

A. It did.

Q. What means did the system of your company have for supplying any water for irrigation, as it was when the ordinance was passed, during the second season after its commencement?

A. I am not sure if I understand you? But we had the same means of supplying water that we had at the time the ordinance was enacted, referring of course to the works, but not to the supply of water on hand.

Q. But you had no supply at all—is that true?—outside of this 10,000 gallons per acre?

A. We had 10,000 gallons per acre only.

Q. How much of this 10,000 gallons per acre was caught and stored from the rains of the season of 1898–'99?

A. Practically all of it, if not all; I think all was caught.

Q. When did the rainy season commence of 1898–'99?

A. My recollection is that the first rain of any consequence was in the latter part of December 1898, or early part of January 1899.

272 Q. Then is it true that the water in the reservoir at the time when this ordinance was passed had been exhausted practically by December 1898?

A. Yes.

Q. How has this system been utilized, if at all, by supplying the water since the exhaustion of the supply in the reservoir in the spring of 1899.

A. Pumping plants have been erected, and water is being pumped into the distributing system.

Q. Is it pumped into the pipes or into the reservoir?

A. Pumped into the pipes mainly. The excess there may be pumped in any one day over the use in that day probably flows into the reservoir.

Q. That is, it flows back through the pipes into the reservoir?

A. Yes sir—mainly. There is one pumping plant located in the reservoir, and that might, if the use was small, go directly into the reservoir without first flowing through the pipes.

Q. Has your company collected the ordinance rates both for irrigation and domestic uses at all times since it was enacted up to this time?

A. Substantially so.

Q. It has sought to collect them, has it not, from all consumers?

A. It has.

Q. Has your company arranged to collect anything in excess of ordinance rates for any water pumped into the pipes and distributing system and used since the exhaustion of the water stored in the spring of 1899?

A. It has.

273 Q. What arrangement was made, if any, between the company and the consumers for such compensation for water used—water pumped—for irrigation?

A. A contract was entered into between the company and most of the consumers, which set out all of the provisions.

Q. Does the company furnish any water for irrigation, except pursuant to the terms of that contract?

A. It does not at the present time.

Q. Is this the form of agreement entered into between the company and the consumers? (Hands witness paper.)

A. It is.

Mr. HAINES: I here offer this in evidence. It is dated the 6th day of April 1899. I will read it, as follows.

(Reads:)—

274 This agreement, made and entered into this 6th day of April, 1899, by and between the San Diego Land and Town Company, hereinafter referred to as "company," a corporation, the party of the first part, and all other irrigation rate-payers who are takers of water from said company, who may sign and become bound by this agreement, parties of the second part, witnesseth:

1. That the said company in consideration of the promises and agreements of the parties of the second part hereinafter set forth, agrees and binds itself in case there is not sufficient rainfall during the irrigating season of 1899 to enable it to impound in its reservoir from the natural flow of the Sweetwater river, sufficient water to supply to the parties of the second part for irrigation during the said season, the amount to which each would be entitled, from said company's water system were sufficient water impounded from said natural flow, that it will, without unreasonable delay, sink the necessary wells and put in the necessary pumping plant or plants, and necessary pipes and flumes for carrying the water to connect with the present system of the company, and by means of such wells and pumping plants will supply during said irrigating season such water as can be reasonably developed and pumped from the bed of said river below the Sweetwater dam, or in its present reservoir site; and carry and deliver the same through the present pipe system to the

parties of the second part, to be divided among the parties of the second part in proportion to the amount of water to which they would be entitled, if a full supply of water could be furnished to them from the natural flow of the stream impounded in the company's system, and in no case any more; provided that the apportionment of the water and the time when it shall be taken and used shall be controlled by the company and a committee to be
275 appointed by the parties of the second part; it being understood by the parties hereto, that the company shall only be bound to make reasonable effort by the pumping plant or plants to develop water to make up the deficiency caused by lack of rainfall, and that in such case, it shall not be responsible or liable for damage because such pumped supply shall be insufficient during the said irrigating season.

2. And in consideration of the promises and undertakings of the party of the first part, and in order to pay for the pumping of water and for no other consideration, the parties of the second part, severally, and each for himself or herself, but no one person for any other person, agree and bind themselves that for all the water pumped by the party of the first part during the year 1899, so long as it is necessary to pump the same and used by them for irrigation, they will pay, in addition to the respective acreage rates for irrigation and the domestic rates an additional rate of 3½ cents per 1,000 gallons, payment to be made therefor monthly or quarterly in advance, as now provided by the rules of the company for the payment of annual rentals for water supplied.

3. It is further understood and agreed by and between the parties hereto that nothing contained in this agreement shall have the effect to abrogate, change, modify, or otherwise affect the contracts, expressed or implied, now existing between the party of the first part and the parties of the second part, or any of them, for their supply of water, or for their water rights; that nothing contained in this agreement shall affect any pending suits or abrogate, change or modify or otherwise affect any existing rights of either party except that for pumping water under this agreement the parties of the second part are to contribute and pay the additional sum as
276 aforesaid; and it is expressly understood and agreed that the amount over and above the regular rates for irrigation and domestic use is additional consideration for the pumping of said water, and not as or for water rentals for said water, which work of pumping water is undertaken by said party of the first part under this agreement solely.

4. It is further stipulated and agreed that the additional amount agreed to be paid for pumping said water for irrigation purposes, shall be and become a lien upon the real estate to which said water shall be supplied, said lien to attach when said water is furnished and be enforceable when the same is due and unpaid; and that upon a failure of any of the parties of the second part to pay any installment of the additional amounts to become due under this contract on demand, including the regular rates for irrigation and domestic use, for the current year, the party of the first part shall

have the right to shut off the water from the premises of the party failing to pay the same, and that it shall not be bound to furnish any more water to such premises until full payment is made, provided that the water shall not be shut off for domestic uses during the term of this contract for failure to pay irrigation rates where the water is taken through a meter.

In witness whereof, the party of the first part has caused its name to be subscribed hereto by its vice-president and its seal to be attached, and the parties of the second part have subscribed their names hereto, this — day of —— 1899.

Q. This agreement was signed by the company through its vice-president, was it?

A. It was.

277 Q. And by the consumers generally under this system?

A. Yes.

Q. And referring to this clause in this contract: "They will pay, in addition to the respective acreage rated for irrigation and the domestic rates an additional rate of 3½ cents per 1,000 gallons," will you state whether the rates for irrigation and domestic rates mentioned in this extract are practically those fixed by the ordinance in question here?

A. They are.

Q. If during the first year after this ordinance was passed the average amount of water furnished to each acre would have been only one-third of 350,000 gallons then the cost of the water per tree would have been three times what you have stated, would it not?

A. The ordinance referred to fixes a rate of $3.50 per acre, based upon a maximum use of 350,000 gallons, and as there are about 70 trees per acre planted the cost per tree would be the same as stated above, namely five cents.

Q. But if only one-third of the 350,000 gallons were furnished the price per gallon would be three times that fixed by the ordinance, would it not, one cent per thousand gallons, if the $3.50 were paid?

A. It would.

Q. You did collect $3.50 during the first year, did you not?

A. We did, substantially.

By Mr. Works:

Q. What have been the weather conditions this year as compared with former years, Mr. Beal, as to the ability of the company to store water?

A. The weather conditions for the latter part of 1898 and

278 the early part of 1899 were, that we received less than one-half the average amount of rainfall.

A. Have this and last year been extraordinarily dry seasons or not?

A. They have been extraordinarily dry seasons.

Q. What was the cause of the necessity of resorting to pumps in order to supply your consumers?

A. The failure to receive in the past three years any addition to our water supply through the ordinary rains.

Q. Had that ever occurred before in the history of the company that you were compelled to resort to the pumps?

A. It had never occurred before. We have had dry single years, but no succession of them.

CHARLES D. LANNING, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?

A. Charles D. Lanning.

Q. Where do you reside?

A. In Boston, Massachusetts.

Q. What official connection have you, if any, with the complainant, The San Diego Land and Town Company?

A. At the present time I am vice-president and treasurer, being a director also.

Q. How long have you been connected with the company in an official capacity?

A. As an officer of the company since 1894. My employment runs over a longer period.

279 Q. Since the organization of the present company, that we call the San Diego Land and Town Company of Maine, what has been your connection with the company?

A. Vice-president and treasurer.

Q. During the existence of the San Diego Land and Town Company of Kansas what was your official connection with that company?

A. From about April 1894 I was treasurer of that company.

Q. That was your first connection with it in an official way?

A. In an official way, except as president's secretary.

Q. Then you took charge of the books of the company as treasurer in 1894?

A. In 1894—yes sir.

Q. Had you any other connection with the company, in the management of it, either as receiver or otherwise, at any time?

A. From the period of the insolvency of the San Diego Land and Town Company of Kansas, in September 1895, until the end of the receivership in the latter part of 1897, I was receiver.

Q. The reports of the president of the company that have been introduced in evidence here show, as I remember, that the nett income of the company from the water department for the year 1894 was $7,850.18; for the year 1893, $13,160.58; for the year 1892, $7,547.93; and for the year 1891, $4,449.27.—Do you know whether or not the statement of the nett income made in these reports of the president was a correct statement or not?

A. It was not a correct, absolutely correct, statement of the amount.

Q. What was the fact as to whether the company did derive any nett income from the water department or not during those years?

280 A. The fact is that during those years, as in every year since the system began in operation, with proper charges for payments actually made on account of the water system, there has been a deficit in its operation.

Q. How did it happen, if you know, that the accounts did not show the correct condition of the financial affairs of the company during that time; or, in other words, if anything was omitted from the items of expense you may state what they were.

A. That resulted from the fact that the books of the water department in all their detail were not kept separate and distinct from the general accounts of the land company, and owing to that fact certain payments made under general vouchers were never so separated as to charge against the water system as a separate property the amount of such general vouchers properly chargeable to the water system.

Q. Do you remember now what those items of expense were that were not included in the expense account, or some of them?

A. Those items were largely on account of taxes, insurance, and items of general expense, including legal expense.

A. According to the testimony of Mr. Boal given in this case, there is an item of legal expenses of $1200, as part of the expenses of the water department. Was that $1200 included in this account showing the expenses upon which this statement of the president was made?

A. For just what years do you mean?

Q. From 1891 to 1894 inclusive.

A. No; it was not included.

Q. And the item of office expenses, which appears in 1897 to have been $2,000, was that included in the account?

A. For the earlier years—no—it was not included.

Q. And the taxes for the year 1897 appear to be $3,954.32.

281 Was that item of taxes, whatever it might have been during those earlier years, included in the statement?

A. None of those items were taken into the statement until the period of receivership.

Q. And insurance—was that included?

A. The same was true of that item.

Q. Now, have you made any calculation or any correction of your books that would determine what amount these omitted items would reach?

A. Yes.

Q. About what would it be?

A. It would exceed the sum of about $38,000. I mean by that——

Q. For all of the years?

A. For the years preceding the creation of the receivership.

Q. And that was of what date?

A. That was of date September 4th and 24th, in different courts, 1895.

Q. Would that amount be divided about equally between the several years mentioned, from 1891 up to the time of the receivership, or nearly so?

A. It would have been about equally divided.

Q. Was there any year during that time in which, if the actual expenses incurred had been included in the accounts, that a nett profit would have been shown in the water department?

A. To the best of my recollection,—no—no single year.

Q. You have spoken about the receivership. Did that receivership and the foreclosure proceedings connected with it result in the sale of the property of the water company?

A. It did.

Q. At what date?

282 A. As I recollect it, June 14 1897.

Q. How was the property first placed in the hands of the receiver, and at whose instance?

A. Upon petition of two stockholders.

Q. Then what followed, if anything, in the way of foreclosure?

A. Beginning with the receivership, the receiver was ordered to pay the interest on outstanding bonds of the company——

Mr. HAINES: Is that a decree of the court?

Mr. WORKS: There was an order of court. You have introduced all the evidence in reference to these cases. I am simply trying to explain——

Mr. HAINES: I think we have the exhibits here. I suggest that you refer to the documents themselves, though it is not necessary to repeat orally what is in them.

Mr. WORKS: I only want to get the general drift of what took place.

Mr. HAINES: Here is a copy of the decree, and the report of the receiver of the sale, if you want it.

WITNESS (continuing): —which bonds were issued under two general mortgages; but at a later stage of the receivership proceedings it became apparent that the property of the company would have to be sold as an entirety, to satisfy and discharge receiver's certificates, which had been duly authorized and issued. The trustee under the mortgages referred to became a petitioning party to the general receivership proceedings, and the property was finally sold for the purpose of satisfying and discharging the outstanding bonds of the company, as well as the receiver's certificates referred to:

Q. Do you know whether, before the receiver was appointed or application made for his appointment, any effort was made to

283 secure the payment of the outstanding indebtedness, bond and floating indebtedness, through contributions or subscriptions for additional bonds by the stockholders?

A. An effort had been made early in 1895, as I recollect the date, to secure subscriptions by stockholders, for an issue of bonds.

Q. Do you know whether or not circulars were sent out to stock-

holders with that view, to induce them to become subscribers to the bonds, in order to meet the floating indebtedness of the company?

A. Yes sir; a circular was issued.

Q. Were any inducements offered to them in the way of discounts to bring about such subscriptions?

A. As I remember it the bonds were offered to stockholders at 92½ per cent. of their par value.

Q. What was the result of those overtures to raise money through the stockholders?

A. Only one bond was subscribed for, $500 in amount, under the mortgage now referred to, what is known as the six per cent. mortgage of the company.

Q. Then upon that failure steps were taken by some of the stockholders to secure the appointment of a receiver?

A. About that time one of the large stockholders of the compnay agreed to finance the compnay by a loan upon security of these bonds as collateral.

Q. Did he advance any money in that way?

A. He did.

Q. Up to what amount?

A. As I recollect it, about $150,000.

Q. Was that indebtedness outstanding at the time this receivership proceeding was instituted?

284 A. It was.

Q. What amount of the compnay's bonds were outstanding then?

A. $500,000 of the 7 % debenture bonds, and the one $500 bond under the six per cent. mortgage referred to.

Q. After the failure to secure the subscription of stockholdersf for the six per cent. bonds that were proposed to be issued, was any effort made to dispose of those bonds?

A. Yes.

Q. Was that successful?

A. It was not. The compnay had practically secured its money at five per cent. then by loan.

Q. Was the company able at that time to meet its obligations without the sale of its bonds?

A. Not except as it was enabled to do so by reason of the loans advanced by the stockholders referred to.

Q. After the appointment of a receiver was any effort made then to secure the payment of these outstanding bonds and other indebtedness of the company from the stockholders?

A. Yes sir. A general plan of reorganization was prepared.

Q. I wish you would look at that paper, and state whether that paper, or a paper of which that is a copy, was issued? (Hands witness paper.)

A. It was. That circular was issued to the stockholders at the date set out therein. (Paper handed to def'ts' counsel.)

Mr. WORKS: I will read this in evidence. (Reads:)

"BOSTON, MASS., *September* 4, 1895.

To the shareholders of the San Diego Land and Town Company:

Upon the application of certain shareholders, acquiesced in by the company, the property of the company was today placed
285 in the custody of a receiver, the appointment being made by the United States circuit court in this city. In reference to this action your directors would say that when they took office in April 1894, large floating debts of the company were due and about to be called, heavy improvements to its property were known to be necessary, its treasury was without cash, and in the midst of the panic then prevailing the company's bonds could not be sold. A reorganization of the company thus seemed inevitable at a time when the interests of the stockholders must have suffered severely by such action.

"Four directors elected Mr. B. P. Cheney as their president (he representing the largest individual holding of the company shares) and he has been able to command the necessary funds to pay off the company's floating debt and to make the necessary improvements in its property which have included the reconstruction and extension of the pipe system, the planting of about four hundred acres of citrus fruit orchards, and the making of the repairs to the pipe system and railway consequent upon the damage by the heavy floods of last spring. Further working capital will be required to carry the valuable property of the company through to a period of dividends; and the directors and officers of your company together with a large majority in interest of its shareholders (who have actually been consulted) are of the opinion that all the facts and circumstances dictate and justify a reorganization of the company's affairs which shall place it in a less burdensome position financially. They believe it to be for the interest of the shareholders that this step should be taken at the present time. Plans for reorganization of the property will be duly presented to the shareholders as soon as possible, and the terms thereof will be made as little burdensome as they can be with due regard to the interests of all concerned.

286

B. P. CHENEY,
WALTER L. FROST,
R. H. WELD,
ALLSTON BURR,
WM. ENDICOTT, 3D,
EDWARD H. MASON,
C. B. MASON,
C. B. SOUTHARD,
C. W. SHATTUCK,
C. S. GLEED,
J. W. GLEED,
F. M. BONEBRAKE,
Directors.

Q. What do you know, if anything, about whether the circular

that I have just read was sent out to the stockholders of the company or not?

A. It was mailed to the stockholders of record at or about the date given in the circular.

Q. Were all of the stockholders, so far as you know, of record in the company's office?

A. They were.

Q. What do you know, if anything, about whether a plan of reorganization was adopted subsequent to that time as indicated?

A. Subsequent to that time various meetings of the shareholders were held, at which a large amount of the company's stock was represented, and finally in December of that year a plan of reorganization was prepared by a committee of stockholders and submitted to the stockholders.

Q. Did that include a form of agreement with reference to the contributions or assessments to be made to pay the indebtedness of the company?

A. It did.

287 Q. I wish you would look at the paper I now hand you, and state whether or not that is the plan of reorganization and the proposed agreement? (Hands witness paper.)

A. It is.

Q. Do you say that was sent out to the stockholders of the company?

A. It was mailed to the stockholders of record on about the date given in the agreement—in the circular.

Mr. WORKS: I now offer in evidence this plan of reorganization and the agreement attached thereto, as Complainant's Exhibit J–1. (Marked by special examiner.)

Q. I wish you would look at the circular I now hand you bearing date December 9 1895, and state whether or not that circular was sent out to the stockholders?

A. It was, being mailed at the same time as the reorganization agreement.

Mr. WORKS: We offer this in evidence as Complainant's Exhibit J–2 (Marked by special examiner.)

Q. Do you know whether or not the agreement sent out with and made a part of the plan of reorganization was signed by any of the stockholders?

A. It was signed in accordance with its provisions by a large part of the stockholders in interest.

Q. Could you state about what percentage of the stock was committed by signing that agreement?

A. As I remember the percentage, about seventy per cent. of the stock of the company was directly deposited under the provisions of the agreement, and about ten per cent. more substantially put in under the general provisions of the agreement.

Q. Then, if I understand you, about eighty per cent. of the stock

responded to the demand in one way or another, either by
288 signing the agreement or otherwise?

A. About eighty per cent.—yes sir.

Q. Do you remember about what amount of money was realized from the assessments voluntarily made by the stockholders under this agreement, and the other stockholders, or the other stock, that contributed?

A. Under the agreement, the entire amount of the assessment on the stock, aggregating $900,000, less an underwriting commission of 2½%, as I recall the figure, was raised by means of the reorganization agreement.

Q. What was done with that money?

A. That money was applied by the committee of stockholders who acted as a reorganization committee to the advancement of money to the receiver during the term of the receivership, for the purpose of paying the operating expenses of the company, including the interest on outstanding bonds, and receiver's certificates, and eventually the whole sum was applied by the reorganization committee to the purchase of the property of the company at receiver's sale for and on behalf of the stockholders who had joined in under the reorganization agreement and contributed their assessment on the stock.

Q. And in the course of the reorganization was a new company organized for the purpose of taking over the property when purchased for the benefit of these stockholders?

A. Yes sir; as provided in the reorganization agreement a new company was incorporated of the same style, but under the laws of a different State, and the securities of the new company issued practically in exchange for the securities of the old company to the stockholders who joined under the reorganization agreement.

Q. What do you mean by the securities of the company?
289 Were there any bonds issued by the new company?

A. The old company had common stock of two millions and a quarter, and the new company issued an equivalent amount of common stock and also issued to the stockholders who contributed the assessment an amount of preferred stock, being $900,000, the precise amount of the assessment paid in.

Q. Then the property, when it was brought to sale under the foreclosure proceedings, was bought in for the benefit of these stockholders in the old company who became also stockholders in the new company?

A. It was.

Q. Was any money paid for the property in the purchase, or were the bonds that had been taken up by the money of the stockholders turned in as payment of the purchase-money that was paid for the property?

A. As I recall it, the payment of the entire amount of the purchase price was made in the outstanding bonds of the company, including the coupons, and the outstanding receiver's certificates, all of which had passed by purchase into the hands of the reorganization committee of stockholders.

Q. You say the property was bought in for the benefit of the stockholders. In whose name was it bought in?

A. The actual bidders for the property were Messrs. B. P. Cheney and Walter L. Frost, as I recall it.

Q. Did they subsequently convey the property to the new corporation that was organized?

A. Under the form of sale the property was conveyed, under the order of Messrs. Cheney and Frost, directly to the San Diego Land and Town Compnay of Maine.

Q. They bought it in, as I understand, and then a petition was filed requesting that the deed be made directly to the new
290 company—is that it?

A. Directly; so that the deed passed from the reciever of the old company directly to the new company.

Q. At the time the property was sold at the foreclosure sale were there any bidders for the property except the persons who were representing the stockholders of the company?

A. There were no other bidders.

Q. Then, if I understand you, this whole proceeding by which the title of the property was transferred to the present company was for the purpose of clearing off the indebtedness of the compnay with the money of the stockholders themselves, and the sale and purchase were made for the purpose of vesting the title in the stockholders who had put up their money?

A. That is substantially what was done.

Q. You have mentioned the fact that one of the principal stockholders of the company advanced a large sum of money to finance the company. What stockholder was that?

A. That was Mr. B. P. Cheney, the father of the present president of the company.

Q. You may state for what purpose or purposes the money that was advanced by Mr. Cheney was used, whether in the water department of the company or elsewhere?

A. Of the floating debt of the company at the time the receiver was appointed a large part was incurred for money advanced to the company and expended by it for certain work of construction and repair on the water system, necessary work, and in addition to the amounts advanced in that way a large amount had already been advanced in 1894, or rather had reached the company by sale of its seven per cent. debenture bonds, to be used also for the purposes of the water system.

By Mr. HAINES—Cross-examination:

Q. Were you conversant with the book-keeping of this compnay since the year 1888?

291 A. Only in a very general way up *up* until 1894 and 1895.

Q. Did you have anything to do in making up the report of December 31 1894?

A. As I remember it, I did.

Q. Wait a moment—made by the board of directors of the San Diego Land and Town Company to the stockholders?

A. I was treasurer at that time. I remember it.

Q. That report was made in order to give the stockholders information respecting the standing of the company, was it not?

A. It was made to give them a general report of the condition of the property.

Q. That report, as in evidence here, contains the following:

San Diego Land and Town Company, water department.

CR.

By balance December 31 1893..	$32,739.49
By rent account	24,564.67
By service account	245.30
Total	$57,549.46

CONTRA.

Expense	$2,656.02
Maintenance pipe line	3,505.03
Maintenance Sweetwater dam	1,689.13
Total	$7,850.18
Balance to credit December 31 1894	$49,699.28
Income for 1894	24,809.97
Expense for the year 1894	7,850.18
Net income for the year 1894	16,959.79

Q. Can you state what was included in the item of expense $2,656.02 in this account?

A. As I remember the items, at that time, they were the direct expense of the engineer in charge, and incidental expenses connected with his work in the administration of the water system.

292 Q. What was there included in the maintenance of the pipe line, $3,503.03?

A. As I remember it, that item included the actual expense of labor incurred in the maintenance of the pipe line, and such material and supplies as were used in repairs.

Q. And how about the item of $1,689.13, maintenance of Sweetwater dam?

A. That, as I remember the item, included generally the expense of the keeper at the dam, with miscellaneous items of expense incurred in the care of the reservoir, such as clearing and other items.

Q. Now this item of expense, to which I have called your attention, $2,656.02, you think was the engineers' expenditure for what?

A. For his salary and expense of team, and so forth, included.

Q. Did it include his whole salary?

A. As I remember it, the whole salary of the engineer at that time was charged against the water system?

Q. Did your engineer serve the water system solely, or was he

also the general engineer of the company in its railway and land service?

A. Generally speaking he has devoted his full working day, or the equivalent of that in time, to the direct care of the water property.

Q. Who does the engineering for the railway and land department?

A. Well, our engineer has general charge of such work as may arise in that way. It has taken but little of his time, and there has been assistance at intervals to take care of that work.

Q. Is it true that Mr. Boal has been the resident manager
293 of the land and town company during all this time?

A. Yes, generally speaking, Mr. Boal has been the chief officer.

Q. Is he more familiar with the distribution of the expenses and with the items of the expense account than you are?

A. Of the details of expense—yes,—he is more familiar being in direct charge of the company's property here in California. But the broad general lines are what I refer to.

Q. I believe you stated that the assignment to the water department of certain items of expense including attorneys' fees and taxes and insurance, was not made until after you were appointed receiver?

A. Broadly speaking, up to the date of the appointment of the receiver those items I referred to were not charged against the water system.

Q. That is about the time the litigation began between the company and the consumers, was it not?

A. Yes sir—just about that time. In fact up to that time no occasion had arisen for any exact statement of the operations of the water department.

Q. Was it not desirable to give the stockholders accurate information of the status of the department?

A. Yes sir. But generally what is reported in such cases is the general standing of the property of the company. The accounting between departments is not considered of direct importance in such reports.

Q. What was the purpose of this suit brought by two stockholders to have a receiver appointed?

A. Well, that purpose I don't know that I can state any better than—or whether I can recollect the precise showing made in their petition for the appointment of a receiver. Of course the pe-
294 tition shows what their purpose was.

Q. Who were the principal creditors of the company at the time of the application to the United States circuit court in Boston for the appointment of a receiver?

A. The principal creditors were the various holders of the seven per cent. debenture bonds of 1900 so called, the six per cent. mortgage bonds of 1905 so called, the holders of the notes of the company in Boston, and the creditors in California claiming for wages, salaries, supplies, and taxes.

Q. Who were the principal owners of the obligations of the company—the individuals?

—. The principal holders were the estate of B. P. Cheney, Geo. H. Hill, Winslow, Lanier & Co. of New York, A. D. Welds Sons of Boston, J. & W. Seligman & Co. of New York, and various other holders of bonds, and some banks holding notes, in Boston, whose names I can't recall.

Q. I believe you stated that after the San Diego Land and Town Company of Kansas had been in the hands of a receiver for some time it became apparent that the property would have to be sold under the mortgage. That was the mortgage of 1890, you call it, or what did you call the seven per cent. mortgage—I mean of 1900?

A. Under both mortgages.

Q. And the mortgage of—the six per cent. mortgage under which only one bond had been sold?

A. Under which one bond had been sold, but under that mortgage a large amount of the bonds of the company had been placed as collateral.

Q. With Cheney?

A. With Cheney and others, including the banks referred to; and those bonds which had been placed as collateral had
295 passed into the possession of the receiver under the instructions of the court.

Q. Do you mean to say the receiver had taken up the bonds from those who held them either as purchasers or as collateral security?

A. He had taken up the bonds that had been held as collateral security.

Q. Where did he obtain the funds for so doing?

A. By the sale of receiver's certificates.

Q. Prior to the time of the sale under the decree of foreclosure, which decree has been offered in evidence here, had all the outstanding bonds of the company been taken up with the receiver's certificates?

A. No: only those bonds that had been outstanding as collateral security.

Q. Now prior to the time of the foreclosure sale, I understand you to say that certain stockholders had deposited their stock, together with ten dollars per share, and enough money had been secured to pay all the debts of the company from the stockholders—is that true?

A. Yes sir.

Q. Why was the sale necessary then?

A. Because those stockholders who had joined in the effort to clear the company of its debts, being about 80 per cent. of the stockholders in number and in interest, held the outstanding securities of the company through their committee; that is to say, that these outstanding securities of the company and against its property, including the receiver's certificates, were not held on behalf of all the stockholders, but the company could not meet its obligations, meaning by that, that the receiver was not in possession of resources that

would enable him to clear off that debt in any other way except by sale of the property.

296 Q. In other words, the sum and substance of it was, that certain stockholders agreed to form a new corporation and buy in this property, was it not?

A. I should hardly put it that way.

Q. Was not that the actual fact?

A. The fact was, that some stockholders agreed that if a substantial part in interest of the stockholders would join them a new company would be formed and the property purchased in such a way as to preserve their interest.

Q. Is this paper which I show you here a substantially correct copy of the certificate of organization of the San Diego Land and Town Company of Maine? (Shows witness paper.)

A. I should say that it was.

Mr. HAINES: I offer this in evidence as Def'ts' Exhibit J-3. (Marked by special examiner.)

Q. What proportion of this eighty per cent. of stock was stock which had been deposited, and which had been forfeited under the paragraph entitled paragraph second of the agreement annexed to the document in evidence here, Complainant's Exhibit J-1, at page 7?

A. Allow me to look at the paragraph. (Paper handed to witness.) Substantially none of the stock deposited was forfeited under that provision; as I remember, there were only two or three shares.

Q. Are B. P. Cheney and Walter L. Frost, whose names are subscribed to this certificate of organization, Def'ts' Exhibit J-3, the same persons who acted as bidders at the foreclosure sale of this property, under the decree of the United States circuit court?

A. They are.

Q. And do I understand you correctly that Cheney and Frost acted as agents for those stockholders in the old company,

297 that is, the Kansas corporation, who had arranged to take stock in the new corporation?

A. Yes—through the mediumship of the reorganizatian agreement.

Q. And the purchase price of this property at the foreclosure sale was substantially made up of the fund contributed by these stockholders in the old company who proposed to become stockholders in the new?

A. Yes.

Q. You were asked whether there was any other bidder at the sale than this committee consisting of Benjamin P. Cheney and Walter L. Frost. Do you remember that you had reported that at the sale two bids were made for the entire estate and assets, and that a bid was made by Benjamin P. Cheney Esq. on his own behalf?

A. That that same bid was reported in two forms. I don't remember the detail of that.

Q. Look at the copy.

(Paper handed to witness.)

A. I remember--yes—the only complete bid that I reported was the one of Cheney and Frost.

Q. Have you made——

A. I say the bid made by Benjamin P. Cheney was not completed by compliance with the terms of the sale, and hence is not reported.

Q. What is all you do say about it in that report?

A. That is all—that at said sale two bids were made for said entire estate and assets; that a bid was made by Benjamin P. Cheney Esq. on his own behalf, and was not completed by compliance with the terms of sale, and hence is not reported. That is one of the bids referred to.

Q. Do you know why the decree was procured in the case
298 of Mandell *et al.* against The San Diego Land and Town Company, in equity, cause No. 660 of the circuit court of the United States for the ninth circuit southern district of California, for the sale of all the assets and estate of the San Diego Land and Town Compnay as an entirety?

A. As I remember it, the parties to the proceeding at that time set out in their petition asking for sale that the conflicting liens upon the property, on the various parcels comprising the property, were such that a sale as an entirety was necessary for the equitable protection of the parties who made up the body of the creditors against the property of the company.

Q. Was there anything in the conduct of this sale to distinguish it from any ordinary sale made pursuant to a decree of court—made at public auction, open to all bidders, was it?

A. Nothing except in the way notice was given, and the terms of payment which were allowed.

Q. The provisions of the decree with respect to notice were followed, were they not?

A. They were. And in addition thereto all stockholders were notified by mail; but I think that was in the decree though.

Q. That is in the decree. And you conducted the sale, did you?

A. I did.

Q. And your report of your proceedings as receiver was correct?

A. It was.

Q. Now what property did this corporation have, at the time that you conveyed to it, other than the property which was sold at the judicial sale just referred to?

A. Meaning by this corporation the present San Diego Land and Town Company?

299 Q. Of Maine.

A. Of Maine. It had not property outside of its corporate franchise.

Q. By corporate franchise you refer to that acquired by it under this certificate under the laws of Maine, which is in evidence?

A. Yes sir. In addition thereto—this might be material—I can't recall whether the additional cash raised by the reorganization committee from the stockholders and not required in the sale had been turned over at that time to the San Diego Land and Town Company

of Maine or not; it was about that time, either just before or just after the time of my deed.

Q. Do you remember the aggregate amount paid for the entire assets of this property pursuant to the sale made by you as receiver?

A. That amount is reported or stated somewhere in the receivership papers. As I recall it, it was some few thousand dollars in excess of $900,000.

Q. Can you refresh your memory by looking at your report?

A. I think probably I can find it there. (Consults paper.) I find on inspection of this report that the amount fixed was $909,562.32, in addition to which there was the obligation to pay interest accumulating, and operating expenses, between the date of sale June 14 and the date of actual conveyance, which, as I remember it, was finally on August 1, 1897.

By Mr. WORKS:

Q. Do you know how much that amounted to?

A. As I remember it, that carried the total amount up to something like $914,000.

Q. And the purchasers were required to give a bond to secure that?

200 A. Yes sir—under t... terms imposed.

By Mr. HAUGH:

Q. Had any more than $900,000 been raised from the stockholders of the old company?

A. No. $900,000 was the amount raised.

Q. Didn't it absorb all of this to buy this property?

A. No. Certain of the outstanding bonds were acquired by the reorganization committee of stockholders, on behalf of those who joined in the reorganization, at a discount from their par value.

Q. But it is true that the whole amount contributed by those who formed the new corporation didn't exceed $900,000?

A. No; it did not exceed it; it was precisely $900,000.

Q. Now, returning again to the former inquiry: Did the new corporation, when you as receiver conveyed the whole assets of the Kansas corporation to it, have any assets except the property so conveyed, and any balance of the $900,000 contributed by those who became stockholders in the new corporation which was not consumed in buying this property?

A. Not, except as I have stated.

Q. What amount of stock was issued by the Maine corporation?

A. $900,000 of preferred stock, and $2,250,000 of common stock, making an aggregate of $3,150,000.

Q. That was issued upon the assets acquired as you have stated?

A. That was issued upon the assets acquired as represented by the stock of the old company and its bonded and other debt.

Q. The Maine corporation didn't acquire any stock of the old company, did it?

A. No.

Q. Then this stock was issued upon the assets bought at the re-

ceiver's sale, plus such portion of the $900,000 contributed by the stockholders of the new corporation as was not consumed in
301 buying them?

A. It was issued against those assets.

Q. Did the Maine corporation acquire any of the stock of the old Kansas San Diego Land and Town Company?

A. Yes sir. It has acquired since the reorganization was completed the stock of the old company deposited under the reorganization agreement.

Q. What assets had the San Diego Land and Town Company of Kansas at the time you say the Maine corporation acquired this stock?

A. It had no other assets than its simple franchise and records.

Q. Had the stock of the San Diego Land and Town Company of Kansas then or since any value?

A. Hardly any market value.

Q. Has the San Diego Land and Town Company of Kansas any property whatever, except the naked franchise under its organization, under the laws of Kansas?

A. No property whatever, assuming that the proceedings were regular. It has been kept alive for that purpose, to hold any old titles that may not have been conveyed.

Q. But all and entire its assets real and personal passed at the receiver's sale, did they not?

A. They were intended to pass, and did pass.

Q. How long after the conveyance made by you as receiver to the San Diego Land and Town Company of Maine was it before there was stock issued as you have stated?

A. The conveyance was made, as I remember it, August 1 1897, and the reorganization certificates issued under the reorganization agreement were taken up and the securities of the new company issued in exchange therefor about December.

302 Q. You say securities of the new company. You mean stock, do you?

A. The stock of the company—issued about December 1897.

Q. Was there any material change in the value of the property purchased at the receiver's sale and by you conveyed to the San Diego Land and Town Company of Maine between the time of such conveyance and the time the stock was issued?

A. No material change so far as I am aware.

Q. What is your recollection of the date of the conveyance?

A. August 1 1897.

Q. Did you have anything to do with the preparation of the letter in evidence here, dated Boston September 16, 1897, addressed to Mr. Oscar A. Trippett, as attorney for George H. Hill and Frank A. Kimball, San Diego California, and signed by B. P. Cheney, president?

A. I shall have to identify that letter by examination. (Witness shown paper.) I should say that was a substantially accurate copy of a letter that I had knowledge of at that time.

Q. Did you assist in preparing it?

A. Probably, if I remember the circumstances.
Q. The statements made in that letter are true, as you believe?
A. As I remember it, they are.

By Mr. WORKS:

Q. Do you think this letter was written by you, or was it written by Mr. Cheney himself?
A. I don't remember the precise circumstances. It probably however was the result of joint consultation between Mr. Cheney and myself and other members of the board.
Q. There is a statement somewhere in this letter, as I remember it, to the effect that the property sold for—here is the state-
303 ment—it is stated in the letter as follows: It is also clear that the property was not bought by any directors, but by a committee acting for a very large percentage of stockholders both in number and amount of holdings, representing between seventy thousand and eighty thousand out of a total of ninety thousand shares, and that a price was paid for the property greater than could possibly have been obtained for it in any other way. Did you mean to be understood by that statement that the price at which the directors or the committee bought in the property was its then actual value?
A. My meaning in that letter is shown more clearly by the circumstances under which it was written. The people to whom it was addressed had occupied the relation of—as they claimed—disputing stockholders in good faith against the sale of the property, although their actual standing in relation to the property was set out in an affidavit which, as I remember it, was filed by me at that time in receivership proceedings, and the statement to them of the value of the property of course was meant to have reference to the peculiar circumstances existing at the time of the sale—the well-known general depression and the general condition of values, that made the sale of any such property, indeed of any property, a matter of great difficulty when its real money worth was considered as an element of it.
Q. Did the fact that the matter of rates to be paid by consumers was in dispute at that time have anything to do with your opinion as to the ability to sell the property for a higher price?
A. Yes. It had a very direct and vital bearing on that whole point.
Q. The company was in fact in litigation at that time with all of its consumers in the endeavor to establish, as it claimed, rea-
304 sonable rates that would make it some return upon its investment?
A. Yes.
Q. And this letter, I infer from the persons to whom it is written and the tone of the letter, was largely for the purpose of avoiding conflict with those particular stockholders, was it not, at that time?
A. Yes, sir—avoiding conflict by showing the equity of the proceedings.
Q. Now with respect to the turning in of the stock under this re-

organization plan, you say about eighty per cent. of the stock contributed directly, either by being deposited or otherwise as you have stated, to the payment of the outstanding debts of the company. Did the other twenty per cent. of the stockholders ever deposit their stock under the agreement?

A. No. There is about that percentage of the stock that never was deposited.

By Mr. HAINES:

Q. In speaking of this letter, you don't mean to say that you didn't express anything but what you believed in the letter, taking it altogether?

A. I believed it all, taking it under the circumstances as they existed at that time.

L. F. DOOLITTLE, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?

A. L. F. Doolittle.

305 Q. Are you connected at the present time in any official way with the San Diego Flume Company?

A. Yes sir; I am secretary of the San Diego Flume Company.

Q. When did you first become connected with the company as one of its officers?

A. In May 1887.

Q. How long have you been connected with the company?

A. Ever since that time—excepting a period of about—I might say ever since that time, because I have been an official in some capacity during all that time.

Q. Have you, during the greater part of that time, been one of the directors of the company?

A. For the last five or six years I have been a director of the company.

Q. Do you know in round numbers what the plant, water rights, and system of the San Diego Flume Company cost?

Mr. HAINES: We object to this as being immaterial.

A. The construction alone cost a little over one and a half million dollars. The entire expenses during the period of construction, with the construction, was over two million dollars.

Q. I wish you would state in a general way of what the plant of the San Diego Flume Company consists?

A. It consists of a series of reservoirs, a flume $35\frac{9}{16}$ miles long, and about 15 miles of pipe.

Q. Can you tell about how many inches of water with its system the company is enabled to deliver to consumers when it has the water to deliver?

A. Under the present construction capacity, in an average year they can deliver from 600 to 700 inches I should believe.

Q. Do you know about how many acres of land the company is able to supply from its system as it exists now, that is, in an
306 average year?

A. On a basis of one inch to ten acres we would be able to supply 6000 acres; on a basis of one inch to twenty acres, twice that amount, or possibly more—about 15,000 acres.

Q. What is regarded as a reasonable amount?

A. There are different methods of consumption. There are a great many who only have one inch to twenty acres, and others have an inch to fifteen acres. There are a few of the consumers who have an inch of water to ten acres of land.

Q. What in your judgment would be a fair average?

A. About an inch to fifteen acres, under the average condition of land in this county under our system.

Q. That would enable the company to supply how many acres from its system?

A. In the neighborhood of about 12,000 acres.

Q. I wish you would state what compensation the San Diego Flume Company has been charging and receiving for water supplied through its system?

Mr. HAINES: We object to this as immaterial.

A. The water rights have been sold along the flume line for $600 an inch for a perpetual right, with a rental of $60 per annum for maintenance fee. Along the pipe line they have charged $800 an inch, with the same rental per annum of $60.

Q. What was the reason for charging the additional amount along the pipe line?

A. For the purpose of compensating for the increased loss of water in carrying it a greater distance, and increased expense in delivering it through a pipe line?

Q. And the fixed charge of the company has been $60 an inch per annum for the use of the water, has it?

A. Yes sir.

307 Q. Is that the rate at which it is furnishing water at the present time?

A. Yes sir, in the majority of cases: there are some cases where there are different rates, but that is the standard fixed for all water sold in the last few years.

Q. Where there is a different rate it is the result of some special contract, made, I presume, in the early history of the company?

A. Yes sir.

Q. I wish you would state, Mr. Doolittle, what amount of water you furnish as an inch of water under your system?

A. In gallons?

Q. In gallons—yes sir.

A. 12,960 gallons in 24 hours is the standard of a miner's inch as furnished by the flume company. It is supposed to represent, and according to engineers it does represent, the amount of water which

will flow through an opening an inch square under a four-inch head above the centre of the opening.

Q. The water as furnished by the company under your system is furnished by perpetual flow, is it not? It is not accumulated for the benefit of consumers, is it?

A. No sir; it is not accumulated. If they don't take their water it reverts to the company; if they do take it they have a right to take it continuously as long as we have it.

Q. Is there any system along the line by which they do themselves accumulate the water for their own use?

A. A large number of consumers have built private reservoirs, in which they store a supply for a number of days when they are not irrigating with it, or during the rainy season. A great many of them do not accumulate, and as a result don't take the water in the winter time. But there is also a system of rotation in use, by
308 which a number of consumers club together, and each one of them takes the supply of the combined irrigators on a certain date in rotation, thereby getting a larger flow and making the water go further.

By Mr. HAINES—Cross-examination:

Q. Where is your main reservoir?

A. Cuyamaca reservoir is the main reservoir, located 55 miles from San Diego in the Cuyamaca mountains, at an elevation of about 4,800 feet above the sea.

Q. And from that reservoir how is the water conveyed to the lands you speak of?

A. It runs through a rocky gorge called Boulder creek with a fall of three thousand feet for twelve miles, a natural course, and there is taken up in what is called the diverting dam into the flume, and runs $35\frac{5}{16}$ miles to the end of the flume, about 14 miles east of this city; and irrigators use from that flume along the line, and also from the pipe running from the end of the flume to the city limits.

Q. This 14 or 15 miles of pipe, where is that?

A. That is located in what is known as La Mesa colony, east of the city, and runs out to connection with the end of the flume.

Q. How large a tract is the La Mesa colony?

A. There are about 3,000 acres altogether in what is known as La Mesa colony, or lot 19 of Ex-Mission ranch.

Q. Did the flume company convey to trustees, as appurtenant to that land, any water or water rights?

A. They conveyed 100 tracts of land under a contract to two trustees, to be sold to 100 purchasers, with an inch of water with each tract.

Q. These tracts were about ten acres apiece?

A. Yes sir; they would run ten to twelve acres apiece.

Q. What is the annual rental reserved from them?

A. On this particular tract it was $30 per annum.

309 Q. That is, if there was an inch to ten acres?

A. It will average a little over ten acres—to about 12 acres.

Q. That would be at the rate of $3.00 an acre?

A. Approximately.

Q. Or if the inch is spread over fifteen acres, it would make $2.00 per acre?

A. Yes sir.

Q. Have you any means of knowing how the expense of patrolling your line of flume, and keeping it in order, compares with the expense of the San Diego Land and Town Company?

A. I could not make any comparison with their expense account.

Q. Have your company at any time fixed as high a price for water right as $100 an acre?

A. I don't think we ever have. We have never sold any water by the acre, or any water rights by the acre; always sold them by the inch.

Q. That ranged from $600 to $800 an inch?

A. Yes sir. We did make contracts that were by the thousand gallons at ten cents a thousand gallons. We have made quite a number of those.

Q. You are pumping now, are you?

A. Yes sir.

Q. That is the pumping water you are selling at ten cents a thousand gallons?

A. I believe that is being sold at five cents a thousand gallons to consumers who had inch contracts, as extra water.

Q. Do you charge that five cents in addition to the three or six dollars per acre, as the case may be?

A. Yes sir; that is an extra charge for extra water. Of course they have been making a reduction in the annual rental
310 where they have had to reduce the supply on account of the shortage of supply. They have made a *pro rata* reduction in the annual rental to correspond with the reduced supply from storage water. As soon as they commenced to pump it was considered to be extra water, and has been sold to such consumers as wanted it and made application for it at five cents a thousand gallons. But in no case have they sold them any more water than their original contract calls for.

Q. That is an inch to ten acres?

A. Whatever they had. If they had an inch to twenty, or if they had a five-inch contract, they might apply for a certain portion of that, as much as they wanted. The company has endeavored to protect its old customers: that is the proposition.

Q. The only limit was, not in excess of what they would have been entitle- to if there had been plenty stored?

A. Yes.

Hearing continued by consent until tomorrow, Thursday, June 15, 1899, at 9.30 a. m.

311 SAN DIEGO, CAL., *June* 15, 1899—9.30 a. m.

L. F. DOOLITTLE, recalled, testifies as follows:

By Mr. WORKS:

Q. I asked you yesterday how many inches of water the flume company's system could furnish. I believe you said from 700 to 800 inches. I wish you would state just how many inches of water it has been and is furnishing, not with reference to the present dry season I don't mean, but what are its obligations to furnish water at the present time under its contracts?

Mr. HAINES: Objected to as immaterial.

A. The flume company has about 334 inches under contract—miners' inches—and of that amount about 310 inches are actually in use, for live contracts on a full supply.

Q. Upon your estimate of one inch to fifteen acres that would amount to how may acres irrigated?

A. That would amount to about 4500 acres.

Q. Do you think that is a fair estimate of the number of acres actually being supplied, or that the company is obligated to supply under its contracts?

A. Yes sir.

Q. At the time the company was furnishing the full supply of water, and before this stringency occurred, in round numbers about what were the operating expenses of the company during the time you kept the account?

A. About $25,000 a year I should think.

Q. Has the flume company been able to make any money or realize any nett profits on the rates charged by the company?

A. No sir. They have been unfortunate in that respect. No dividends have ever been declared, and they had to forego the payment of interest on their bonds on several occasions.

Q. In supplying water from the flume company where do they furnish the water to the consumer?

312 A. The water is delivered to the consumer under our contracts, at the flume line of the company, the main flume line.

Q. Then the company constructs none of the laterals or service pipes or flumes?

A. No. It constructs none of the laterals, nor does it allow for any wastage or evaporation in the laterals. It measures the water at the point of delivery.

By Mr. HAINES:

Q. Where are the main offices of your company?

A. Of the San Diego Flume Company?

Q. Yes sir.

A. In San Diego, corner of Fifth and B streets.

Q. You don't maintain a foreign office, do you, out of this State?

A. We do not.

Q. Under what headings do you, on your books, keep a record of your operating expenses?

A. Under the heading of operating account and office expense account—various expense accounts of maintenance of the plant.

Q. Does $25,000 include taxes?

A. It is my impression now that it does, although we have not been able to pay our taxes unfortunately for several years past, for the same reasons that we have not paid dividends.

Q. Where does the flume company system terminate?

A. At the lower end, of course, I suppose you mean?

Q. Yes sir.

A. At the dividing line between the city and the pueblo lands on the east of the city, or rather the ex-mission lands on the east of the city.

Q. What did you say was the whole distance you conveyed your water from the dam down to the city line?

A. From the Cuyamaca dam?

313 Q. Yes sir—to the city line, is how far?

A. The direct line from the diverting dam, where our construction work commences is about 44 miles. There is 12 miles of the distance, in addition to that, from the Cuyamaca dam which is a natural gorge, called Bowlder creek.

Q. What sort of a conduit did you say you have for this 44 miles?

A. There are 35 9/16 miles of open flume, and 7 9/10 miles of pipe line for the main conduit.

Q. Which connects with the flume?

A. Yes sir.

Q. This flume is built of timber?

A. Yes sir.

Q. Carried at a grade of course from the diverting dam down to the end of it?

A. It is. There is about a mile of tunneling in that flume work, a little over a mile.

Q. Is it not true that there has been a great shortage in receipts and in nett profits in the business of the flume on account of lack of water?

A. Yes sir; it is true that since the dry season came on us we have had to reduce our rentals in accordance with the reduction in the supply, or rather we have chosen to do so.

Q. How long has your system had difficulty in supplying the amount of water contracted for?

A. There have been three years altogether, since the system was constructed in 1887, that we have had to reduce the full supply of water for a portion of the time during those years.

Q. How has it been during the past three years, immediately past?

314 A. The two years immediately past, including the present one, we have had to reduce the supply; and about three years before that we had to reduce the supply, a portion of the year, two or three months, owing to failure of the rainfall in the mountains.

Q. Has the Cuyamaca dam gone dry during any part of the last two years?

A. Yes sir; it went dry last year for the first time; and it is also dry this year, at the present time.

Q. That would cover two irrigating seasons?

A. Yes sir.

Q. Did you say the company, by reason of the shortage of the water, or on account of this shortage of water, voluntarily reduced the contract rate per inch?

A. It didn't reduce the rate, but reduced the amount to be paid under the contract in proportion to the amount of water furnished, but at the same rate.

Q. You were asked in a general way whether the flume company had made any profits. Can you state whether the irrigators under your system have made any profits during the past two years?

A. I am inclined to think that they have not; but I have no definite information on it—as a rule. I think there are exceptions, where they have made some money.

Q. Is it not your observation that generally in this region—speaking of your system—all ranchers who have been irrigating their lands *beve* been slipping backwards financially?

A. Well, I have observed that ranchers, whether they irrigated their lands or not, were not making money during the last three or four years, from causes outside of the question of ir-
315 rigation, and that the rancher who irrigated was usually more fortunate than the one who did not.

Q. I am confining the question now to ranchers who take water under your system?

Mr. WORKS: If you know anything about it.

Q. You ought to be pretty familiar with their condition. You make collection of water rental from them, do you not?

A. Yes sir; but I have not any personal knowledge of their private affairs, any further than that we have to dun some of them always, even in the good times, several times before we get our money.

Q. I want to get your opinion. You ought to be conversant with the matter, coming into contact with ranchers, do you not? who irrigate under your system constantly?

A. Yes sir.

Q. What is your judgment about whether they have been able to prosper under the conditions or not?

A. Well, as near as I can estimate, or as near as I can judge, their complaints have been that they have not made much money on account of the low price of their products. But the last year they claimed to have had a very good year, those who were fortunate enough to have anything to sell.

Q. How many men under your system, which you say comprises 4500 acres of irrigated land, have been able to avoid losing property by their attempts to cultivate their land?

A. I have not any idea on that subject, or knowledge either.

Q. Are you acquainted with the values of this irrigated land under your system?

A. In a rough way.

Q. Speaking of your knowledge, have the values of these lands been maintained during the past two or three or four years?

A. Pretty fairly. I don't think there has been much fall in the value of irrigated lands, not nearly as much as in the value
316 of unirrigated lands.

Q. Your system irrigates lands in La Mesa colony and Lemon Grove, does it not?

A. Yes sir.

Q. Is it not a fact that the market value of those lands has fallen very much in the past two or three or four years?

A. Not to my knowledge.

Q. Have you any knowledge upon the subject?

A. Yes sir; I have made some personal loans on property in that section and have known personally of sales of property in that section. While I have no definite data in regard to it, my impression is that the price has held up very well on the better qualities of land. Of course, where experiment has shown that the land was not suitable for the work to which it was devoted it has probably fallen in value.

Q. Has your company made any attempt to increase the rates per inch of water provided for in your contracts because the company has not been making any money? What I want to know is, whether your company has attempted to throw over these contracts and increase the rates in violation of the contract?

A. No sir; they have accepted the rates as established wherever the parties paid their rental promptly.

Q. They have not increased them even where they have not paid them, have they?

A. They had a case in the United State- court, suing a firm called Souther and Crosby, in which we made a claim for the rate fixed by the board of supervisors of $120 an inch for water, although their contract rate was $60 an inch, because they hadn't paid the rental, and the rate fixed by the board of supervisors was believed to be rate which would govern.

Q. That is, your idea was they forfeited their contract?
317 A. No sir.

Q. By not paying?

A. The idea was that the recent decisions of the courts fixed the rates made by the board of supervisors as the real legal rate.

Q. What court do yo- speak of?

A. The United States courts, and the State court I think. I think they have made decisions of that kind.

Q. This Souther-Crosby case is now pending in the circuit court of appeals is it not, in this district?

A. I believe so. I am not so familiar with that as Judge Works would be.

Q. In that same case your company sought to enforce by cross-bill a contract for the sale of water right, did it not?

A. Yes sir.

Q. And so far as you have heard from the circuit court of appeals that court maintained the vadidity of a contract such as you sought to enforce, did it not?

A. That is my impression—that they maintained the validity of the contract.

Q. It is now pending for rehearing, is it not?

A. That is my present information.

Q. But in all cases where the consumers lived up to their contracts, you have not attempted to repudiate those contracts?

A. No sir.

By Mr. WORKS:

Q. The consumers along the line of the flume did undertake to repudiate the contracts fixing the annual rentals by petitioning the board of supervisors to fix the rate, did they not?

A. Yes sir.

Q. And the result of that investigation before the board of
318 supervisors was to fix the rate by ordinance at $120 an inch, was it not?

A. Yes sir.

Q. Just double what the company was actually charging?

A. Yes.

Q. And in the Souther and Crosby case, Souther and Crosby were attempting to rescind and repudiate one of those contracts, were they not?

A. Yes sir.

Q. And in view of their repudiating the contract, the company claimed it was entitled to the rate fixed by the board of supervisors?

A. That was the stand taken by the company.

By Mr. HAINES:

Q. You say the consumers undertook to repudiate the rates by applying to the board? How many consumers applied to the board?

A. There were probably—I could not give you the exact number—I should judge a dozen or fifteen, or something like that.

Q. Of the people who had contracts?

A. Yes sir.

Q. Then in answer to Judge Works' question, you really meant to be understood that a dozen or fifteen people applied to the board, and not all the consumers under your system?

A. My impression now is that, in refreshing my memory, there were a number of people who did not have contracts who joined in that petition to the board of supervisors. Easton Frincke & Wilde, who had a large contract with us, were the main movers in the effort to have the rates established by the board of supervisors.

319 Q. That was a speculative real-estate firm?

A. Yes sir.

Q. You don't mean to be understood that your consumers gen-

erally who made contracts with your company engaged in the enterprise, do you?

A. There were several of our consumers included in that list, but not our consumers generally I would not say.

By Mr. WORKS:

Q. With reference to the supply of water during the present year and last year, how has the supply of the flume company been augmented, if at all?

A. By quite expensive development of water in the river bed of the San Diego river adjoining our flume system, at a place called the Monte, a short distance above Lakeside.

Q. Is the company, through an arrangement with the consumers, charging any extra compensation for supplying the water developed in that way?

A. They are selling to those people who have already got contracts with the company, and who are not getting a full supply on account of the drought, water pumped from the river at that source, at five cents a thousand gallons, as extra water.

By Mr. HAINES:

Q. Your company exacted contracts from all people who got this pumped water, did it?

A. It refuses to sell water to anybody other than the regular contractors from that source—people who hold contracts with it for water under water rights.

Q. Are you now drawing any water from the Cuyamaca reservoir

A. It is empty.

Q. So that all the water supplied is pumped water—for irrigation?

320 A. Yes sir.

Q. Now what is the total charge for the water you supply to these people?

A. The price fixed is five cents a thousand gallons during this dry season.

Q. Now that is all the water costs them, five cents per thousand gallons?

A. Delivered in our flume system; that is the price at the Monte pumping works.

Q. It is delivered at the same place where you would deliver water if you had it in your reservoir?

A. I am not certain as to that point at this time—whether the measurement is made at the pumps or at the orifice where it is usually taken.

Q. I mean the water is delivered at the usual place of delivery when your reservoir is full, to the consumer?

A. I am not certain whether the measurement is made——

Q. I was not asking about the measurement. But the water is delivered at the same place as when you have water in your reservoir?

A. Yes sir; it is carried through the flume to the point where it is taken out.

Q. But you are not certain whether the measurement is made where the water is delivered at the pumps, or at the place where it is finally delivered to the consumer?

A. No sir; I don't know as to that.

Q. Now, in addition to this five cents a thousand gallons, does your company charge and collect from the people who use this water the six dollars and three dollars per inch rates under the contracts?

A. They collect those rates only during the time they furnish them with storage or storm water.

321 Q. Then when they are furnishing them with storage or storm water the pumping rate is not being collected either, is it?

A. Not unless we are furnishing them pumped water in addition to their pro rata of storage or storm water.

Q. And then only for the pumped water?

A. Yes sir.

JOHN E. BOAL, recalled, testifies as follows:

By Mr. WORKS—Direct examination:

Q. Reference has been made here to the fact that your company charges the regular rate of $3.50 an acre, and in addition to that charges so many cents on the thousand gallons, on account of the extra cost of pumping. Do you know at whose instance that old rate of $3.50 per acre was retained in the contract?

A. At the instance of the water-consumers' committee with whom the contract was negotiated.

Q. Was not your proposition to charge simply an amount for the water that you pumped, foregoing the $3.50 rate for the time being, and they insisted upon retaining the regular rate?

A. That was our proposition.

Q. And that was their contention, was it not?

A. That was their contention, that the rate of $3.50 per acre should stand.

By Mr. HAINES—Cross-examination:

Q. Mr. Boal, this $3.50 acreage rate is the ordinance rate, is it not?

A. It is.

Q. And there is also a 50 cents per thousand gallons rate provided for in that ordinance for domestic uses, is there not?

322 A. Yes sir.

Q. Did your company at any time propose to forego the domestic rates under the ordinance?

A. We did not.

Q. So that the company was perfectly satisfied to retain the domestic rates provided for in the ordinance, in addition to those pumping rates?

A. Yes sir.

Q. And it is a rule of your company, is it not, that persons who take water for irrigation upon lands whose they reside are not exempted from paying the domestic rates because they may have wells or cisterns?

A. It is so set out in our rules; in practice however it is not always insisted upon.

Q. It is not generally insisted upon?

A. It is not generally insisted upon where they have other adequate means for supplying a domestic water.

Q. Have you made any exception from your rule in the case of any persons who have cistern water for domestic use?

A. Not from those persons who have cistern water only.

Q. Is it not a fact that it promotes the convenience of the company in collecting its rentals to maintain the collection of the ordinances or established rate, whatever it may be?

A. I don't regard it that it does. It always seemed to me that there would be less confusion, at least that there might be less confusion, if the rate of so much per thousand gallons had been established and paid for by the consumer.

Q. That is, where you are pumping?

A. While we are pumping.

Q. To have a single flat rate per thousand gallons, whether it came from storm water caught in the reservoir, or pumped?

A. It is never expected by us that the storm water should
333 be charged for at the same rate as pumped water. It would have been entirely possible to have made an arrangement by which that water could be estimated and delivered to those entitled to it.

Q. That is, you think it would have been more convenient to the company to have had the ordinance or other established rate for storm water caught in the reservoir applied intermittently, and cease when that supply was out?

A. There were several plans under consideration at the time the contract was being negotiated, by which the storm water would have been delivered to the consumer on an equitable basis.

Q. Do I understand you to say that the company preferred to entirely supersede the ordinance or other established rate while it was furnishing water from the pumps alone?

A. So far as relates to irrigation water.

Q. But in pumping this water you pump it into the pipes of the system, do you?

A. We do.

Q. So that the company prefer to supersede all legally established rates, so far as the use of the distributing system was concerned, while it became necessary, or was necessary, or is necessary, to pump water?

A. That was our proposition, so far as relates to irrigation water.

Q. The company entered into this contract put in evidence here voluntarily, did it not?

A. It did.

Q. And is pumping to its own lands that are being irrigated under the same system from the same works that it is pumping for the other consumers, is it not?

A. It treats all lands under its system on precisely the same basis, and of course it pumps to its own land on the same basis that

324 it pumps to any other land.

Q. Have you opened an account upon the books of your company with the company's lands, in which you charge to them the pumped water at the rate fixed in this contract?

A. We have.

Q. Do you keep that distinct from the receipts under the ordinance?

A. It will show separately,

Q. That is also true of other consumers under this system, is it not?

A. It is, I might say, as to the general books of the company. I have no knowledge of what final form those accounts will take. But the books will show the amount of water pumped and delivered, and the amount collected for that pumped water.

Q. Are you able to state, leaving out of account all the company's lands, outside of National City, under irrigation from this system, what proportion of the receipts are for domestic uses as compared to the receipts for irrigation?

A. I cannot state what the domestic rec-ipts would be.

Q. They furnish a very important part of the income, do they not?

A. A fair proportion of the income—yes sir—outside of National City, but not a very large proportion in my judgment.

Q. How many acres of land of the company's are under irrigation outside of National City?

A. I cannot answer that off-hand.

Mr. WORKS: That is all shown in the record already, Mr. Haines. It was very fully gone into. The evidence taken before the board of supervisors is all in, and that showed the exact acreage owned by the company and owned by other people.

Q. I don't know that this record shows anywhere—but we

325 can take it in a very short time here. Will you state how far from Chula Vista is the reservoir of this company?

A. In a direct line?

Q. In the line traversed by its mai : pipe.

A. Substantially five miles, as I recall it.

Q. And the pumping works, where are they situated?

A. The Linwood lands are situated less than a mile east of the east line of Chula Vista. The Sunnyside plant is about three and a half miles east of the east line of Chula Vista. And the reservoir plant is situated in the bed of the Sweetwater river about a mile east of the Sweetwater dam, in what is ordinarily the reservoir.

326 H. N. SAVAGE, recalled, testifies as follows:

By Mr. WORKS:

Q. You have heard the testimony of Mr. Doolittle, the secretary of the San Diego Flume Company, as to the manner of supplying water to their consumers, that is to say, that the water is furnished directly by their main flume line, and that no laterals are run at the expense of the company. What is the fact with reference to the complainant The San Diego Land and Town Company, in that respect?

A. Its system was designed and constructed to deliver water to every five-acre tract in northern Chula Vista.

Q. You say the system was designed in that way. Was that design carried out in the construction of the plant?

A. I stated that it was designed and constructed to accomplish that result.

Q. Then the expense of running out these laterals, and the actual connection of the system with the various tracts of land owned by the consumers has been borne by the company?

A. It has in so far as the delivering the water to each of the tracts is concerned.

Q. That is what I mean. Of course you don't construct the systems on the tracts for the delivery of the water?

A. We do not.

Q. What expense is borne by the consumers themselves in connecting with your lateral pipe lines reaching their lands, and the distribution of the water upon the lands of the several tracts?

A. The consumers pay for the tapping of our main pipes and the necessary service pipes to convey the water from our mains

327 as located in the streets to their property lines.

Q. In speaking of your main pipe lines, you include these smaller pipes that are run out to connect with the various tracts of land, I suppose?

A. We do.

Q. What is the manner of delivering water by you to consumers, as to whether it is delivered by heads at fixed times, or whether it is continual and always on tap for the use of the consumer, when you have the water?

A. Previous to these last two dry seasons the water has been delivered under constant pressure to the irrigators, to be taken by them at any time and in practically any quantity per month or week or day that they might desire. Since and during those two years it has been delivered in uniform quantities per day, and the water-takers having meters placed permanently last season had practically the same privileges of taking their supply when they chose, provided they took not to exceed their apportioned quantity during the season. This season the water is delivered to the water-takers in accordance with an arrangement requested by themselves, whereby they accumulate the quantity apportioned to a varying number of acres, from fifty to one hundred, and then between themselves de-

termine which shall have that quantity of water at given times, the supply being constant for them at all times.

Q. Has the change in the manner of delivering the water in this respect resulted solely from the shortage of water resulting from the drought?

A. It has.

Q. And will the company upon being able to store the necessary water, renew the old manner of delivering the water, under constant pressure and at all times?

A. It will.

328 Q. What are the advantages of a system of that kind, delivering water under pressure and at all times, without limitation, except as to the total amount to be delivered, over a system that furnishes water, say, from an open flume or ditch, and furnishes it by heads or at stated times?

A. The conditions vary with different systems. Under the flume company, with which most of us here are more particularly acquainted, the water-takers are compelled to go to the company's flume for their supply, and the small land-owner is also compelled to put in a storage system, a reservoir to impound the water that he is paying for during the winter season when he cannot use it, in order to avail himself of it in the irrigation season when he requires it. But I am informed that mostly they don't feel able to store their own water, and consequently only receive that portion of their constant flow that may run during the irrigation season, about 200/365 of what they pay for. With our system, as constructed and operated, the irrigators get their full apportionment at such times as in their judgment it is most valuable for their trees.

Q. That is, your company stores and accumulates the water for the benefit of the consumer, so that he may take it when he desires to use it, while the flume company does not, and if its water is stored at all it must be at the expense of the individual consumers?

A. It must be. And furthermore, the small consumer is unable to benefit but little from his supply from the flume or other systems delivering water throughout the year at a constant flow, because of the limited quantity that he will get per week or month. He is compelled to cumulate with some of his neighbors in order to irrigate with any profit to himself.

Q. Can the ordinary consumer on small tracts of land provide storage adequate to the accumulation of water outside of the

329 irrigation season with reasonable expense, so that the entire water could be saved in that way?

A. The expense would be very heavy for each water-taker to construct a storage reservoir of his own, so great that, as stated before, large numbers of them do without their water that they pay for rather than incur this additional expense.

Q. Can you give some idea as to what the cost of storing and accumulating this water for the benefit of the individual consumers is to the company, or what expense per inch or per thousand gallons is saved to the consumer by the storage and accumulation of the water for the benefit of the consumers?

A. That is an impossible question to answer intelligently offhand, without going over a good deal of ground and making some extensive calculations. The cost to the consumer varies with each individual case. If a man's land is so located that he may construct a reservoir on a considerable elevation, close to his property, the expense would be very much less than if he be compelled to either purchase an additional piece of land for that storage or else put in a very large pipe system from a reservoir to be constructed with embankments on his own property, where in many cases it is more or less level. I might get the cost of some of these individual reservoirs in these systems, and cite specific cases, and give you the cost, but it would be a very difficult matter to say what was the cost to the average man, because many of those who have reservoirs have constructed them to impound only a portion of their winter's flow.

Q. Taking it to be true that in order to preserve and use the *the* water advantageously it would be necessary to store the supply for at least six months of the year, when the water would not be used for irrigation. I suppose it would be easy to calculate what sized reservoirs would have to be provided for storing and accu-
330 mulating a certain quantity of water?

A. It could be, but in that case the cost will vary from one to five per cent., according to the local conditions.

Q. Laying aside the question of the cost to the consumers of preserving the water in that way, have you made any figures or any estimate upon what the storage of the water and the accumulation of it actually costs your own company?

A. We have the cost of our reservoir and our dam.

Q. Those are provided especially for the purpose of storing the water?

A. They are.

Q. And if the water were furnished without storage or accumulation that expense would be wholly unnecessary?

A. It would.

Q. For instance, if it was furnished from a running stream, which supplied the water through open ditches, all the expense your company has gone to in the way of providing for the storing of the water would be an unnecessary expenditure?

A. It would be.

Q. Is it usual or customary for water companies supplying water in this State to furnish a supply under constant pressure, as is done by your company, for irrigation purposes?

A. So far as I am informed the San Diego Land and Town Company's Sweetwater system is the only irrigation system of any considerable size in existence that delivers water to its irrigators under constant pressure, allowing them to take such a per cent. of water as they may elect, within such times as they may elect.

Q. Mr. Doolittle, the secretary of the San Diego Flume Company, has testified that their company from its system supplies 310 inches of water, that irrigates about 4,500 acres of land; that they
331 charge for the water delivered from the open flumes $600 an inch, and from inclosed pipe lines $800 an inch; and that

they charge $60 an inch for the annual rental for the water used. Can you ascertain upon that basis what the rate per thousand gallons would be?

A. Unless the water-takers were to construct storage reservoirs and hold over the winter flow, it would cost them 2 3/10 cents per thousand gallons for that portion of their total amount that they could avail themselves of during the irrigation season.

Q. Taking the rates as fixed by the ordinance in this case for your company, $3.50 per acre, furnishing a supply of 350,000 gallons as a maximum, what would be the rate per thousand gallons?

A. One cent.

Q. And the rate of $7.00 an acre that is claimed by the company would return two cents per thousand gallons, would it?

A. It would.

Q. What are the advantages, if any, of a system like yours, where the water is furnished under a pressure, with reference to the supply of water for domestic uses, as compared with a system which supplies water not under pressure?

A. The supply of water under these systems delivering an irrigating head every thirty days, a little more or less frequent, is not sufficiently valuable to be availed of in most cases, the irrigators having to put in a reservoir or haul their water practically all the time. Our system being designed and constructed for a domestic system primarily, with water for a great number of individual tracts, furnishes water under constant pressure the same as any other domestic system, the supply for our irrigators in general being as good in pressure or better than the average city throughout the United States.

332 Q. Have you made any estimate of what the cost would be to the company of storing and delivering the water during the irrigation season to the individual consumer, and what expense would be saved to the consumer himself per inch in storing his water for use during the irrigation season? If so; state what the result of your figures is.

A. Taking an individual case, with reasonable favorable conditions as to elevation of land and condition of soil and a miner's inch of water, there would be available for the two hundred days about 2,592,000 gallons, and to be impounded the balance of the year, to be available those two hundred days, about 2,138,000 gallons. The cost of the reservoir would vary from, I should say off-hand, a minimum of $1500 up to four or five thousand dollars, according to the nature of the soil. Adding that expense to the cost of the water under the flume system would increase the cost per thousand gallons from 2 3/10 cents to 3 5/10 cents, in comparison to the present cost to the irrigators under the Sweetwater system of one cent.

Q. And that expense of providing means for storing the water during the rainy season is absolutely necessary, is it not, in order to give the consumer on the flume line the same service that your consumers get on your line?

A. It is.

By Mr. HAINES—Cross-examination:

Q. You are acquainted with this flume line, are you?

A. I am, sir, in general.

Q. It stores its water in a reservoir at Cuyamaca lake as you do in the Sweetwater dam, in the same way, does it not?

A. It stores a portion of its water in the Cuyamaca lake, and derives a portion of it from the flow of the stream, taking it out of it at its diverting dam.

333 Q. What other reservoirs are on its line?

A. It has a reservoir at the terminus of its flume.

Q. What is that known as?

A. I don't recollect the name of that; it can be easily had; it is well known. It also has a reservoir known as the La Mesa reservoir, that is near the termination of the flume line.

Q. This La Mesa reservoir supplies the La Mesa colony, does it, with water?

A. The La Mesa reservoir is a storage along the main conduit, the water being taken from it into the pipe line, either by gravity, or at times by pumping; if by pumping, I think most of it comes to between the La Mesa colony and the city limits; and if by pumping, I think a portion of it is also available throughout the La Mesa colony for irrigation.

Q. Do you know how Lemon Grove colony under that system gets its water?

A. The majority of the water for Lemon Grove is taken by pipe lines, either steel or wood, or by flumes, in bulk of some considerable quantity, first by the property-owners, I think, before the land was sold, and the ndistributed by the land-sellers to the individual tracts.

Q. Was this delivered in a reservoir?

A. Reservoirs were constructed in many cases, some of them to impound a portion of the water from the general supply of these laterals, and in other cases the individuals built small reservoirs for impounding their own individual supply.

Q. Where does this flume company's line terminate?

A. It terminates near what is known as Eucalyptus pass.

Q. I mean at this end. Where is the final place of discharge of water from this flume company's system?

334 A. The flume company's system ends at the east boundary line of the city of San Diego.

Q. It there connects, does it not, with the distributing system for San Diego?

A. I understand it does.

Q. And supplies the water for the city of San Diego?

A. A portion of its is at times derived from that source, and another portion of it from a pumping system in the San Diego river.

Q. But so long as the reservoir, the main reservoir at Cuyamaca lake, has sufficient water, there is no pumping, is there?

A. No sir; I don't think there is.

Q. You are assuming that under the contracts made by the flume company to sell an inch of water, by which a water right for an inch of water is sold, and a rental reserved of from $30 to $60 per inch, that the company only delivers two-thirds of the inch, that is for 200 days out of 365, approximately 20/36 of an inch?

A. I am informed by the company's representatives——

Q. I ask, do you assume that?

A. Yes. If you will allow me—I am informed by the company's representatives and the water-takers that they have a right to the full miner's inch flow for the year, provided they desire to take it, flowing constantly; but in case they don't desire to take it I am informed that they cannot accumulate it in the flume company's system, but can only take their constant flow during those 200 days.

Q. Are you now speaking of the contents of the contracts made with the persons to whom they have sold these water rights?

A. I am speaking of what I understand to be the contract between the flume company and its water-takers.

335 Q. It is a written contract in form, is it not?

A. I understand it is.

Q. Do you know whether that company has been in a situation to furnish the full amount of water contracted to its consumers by it for the past three years?

A. I understand that it has not.

Q. How long is it since its reservoir has been filled, its Cuyamaca reservoir?

A. I have not the information at hand.

Q. Has that system been compelled to waste any water for the past three years because its consumers didn't accumulate it in reservoirs?

A. The winter flow of the river water is undoubtedly wasted.

Q. I am speaking of the last three years?

A. I think, without doubt, there has been quantities of water wasted, because it was not stored in the reservoirs by the water-takers.

Q. Do you mean to say that the flume company has poured any water back into the San Diego river during the past three years?

A. I think without doubt it has done so.

Q. During the past year any?

A. I could not state positively as to that. That information can be very easily had, but I believe that there have been times within the last two years, possibly within the last one, during the winter season, when there has been water available for irrigators that they have not been able to store because of lack of reservoirs of their own. The majority of this water during the last two years has of course been taken by the flume down *the* their La Mesa reservoir that was constructed for that purpose. Water could have been had by the irrigators if they had desired along their flume.

336 Q. Do you know whether the La Mesa reservoir was filled during the past two years?

A. The La Mesa reservoir was not filled this past year, but it contained a large quantity of water a year ago.

Q. Then the defect of that system would seem to be that it has not sufficient reservoir capacity at the end of its flume—is that your judgment?

A. If the system had more reservoir capacity it would be able to supply more water undoubtedly.

Q. And in your judgment is it good engineering which builds a flume to carry a supply of water, where water is so scarce as it is in this country, and for want of reservoirs turns it back into the river?

A. The question of engineering is not the controlling one in southern California water systems altogether.

Q. I ask you that question. I don't ask you whether it is controlling or not.

A. At the time that flume was built there was very little reliable information as to what would be the conditions of rainfall, run-off, or requirements.

Q. I am asking you—I put it in this form—would you as an engineer say it was good engineering, knowing the conditions as they are here, for the flume company to pick up water and take it into its flume, then pour it back into the river because of want of storage capacity?

A. The flume company have endeavored by their La Mesa reservoir to utilize that water and save it; it had been running to waste for a great many years in large quantities.

Q. Then if they store it in that La Mesa reservoir, that reservoir performs the same service for the consumers under it that your reservoir does to your consumers, does it not?

A. It does not, because our reservoir and pipe system to-
337 gether store and deliver the total quantity of water that we receive pay for when we have the water to the consumer during just such times as he wants to take it; while the flume company under no consideration undertake to deliver to him to exceed 1/365 of his water per day.

Q. Do you know that to be a fact as to consumers under the La Mesa reservoir?

A. I understand that to be the fact for consumers under any part of the flume system.

Q. Do you understand it to be the fact *they* they must pay for a full inch per day throughout the year, although they only use water—the inch—during the 200 days?

A. I understand that to be so.

Q. You understand they pay the contract rate of $30 to $60 per inch but they only receive that inch for 200 days?

A. I understand that to be so—when the water is to be had by them from the flume during the balance of the time.

Q. Have you examined any of the forms of contract?

A. I have not.

Q. As your demand of water has been pressing upon your supply you have, in managing your system, adopted this rotation of the use of water, have you not?

A. This rotation of the use of water has been put into effect this season because of having a stated quantity of water developed and

pumped per day. Last season there was no rotation of water except as made necessary by the use of meters, and the moving of them from one tract to another.

Q. Is it not true that the last seasion consumers on lower ground were asked to refrain from using water, so that consumers upon higher ground might have pressure to deliver water?

A. That has always been true in a very limited way.

338 Q. It has been true so far as it was necessary, has it not?

A. So far as it was necessary; but the necessity has been a very limited one, and then confined almost entirely to certain lateral pipe lines. In each of those cases however the time was divided week and week about, and there was in almost every case sufficient pressure to that the people on the high lands had a constant domestic supply, while those on the lower lands and those individual laterals were taking their full irrigation supply.

Q. Do you know that the irrigators of the flume system get their domestic supply from the same system?

A. I think a good many of them do.

Q. That is the same supply that furnishes domestic and other water for the city of San Diego?

A. In part—yes sir.

Q. That is, when there is any water in the reservoir and delivered by the flume other than pumping?

A. Yes sir.

Q. And when the water is pumped, it is furnished by pumping to those people for their irrigation and domestic use as well as to the city, is it not?

A. The flume compnay constructed a pump last year to supplement the supply from the reservoir, which became the entire supply after the reservoir had been exhausted, and the water from that plant was available for all purposes, irrigation and domestic.

Q. Both to the irrigators and in this city?

A. I understand a portion of the water developed by that Monte pumping plant was taken to the city.

Q. How far is Monte distant from La Mesa.

A. About ten miles.

Q. And from the Lemon Grove colony, under the flume?

339 A. Lemon Grove colony is substantially south of La Mesa, and is about the same distance from Monte that La Mesa is.

Q. Did you give in detail, before the board of supervisors, in your testimony in this matter, the location of the pipe lines of the company's distributing system in Chula Vista?

A. I did, each one.

By Mr. WORKS:

Q. With reference to this supply of water to La Mesa, you say there are certain reservoirs there for the storage of water. That whole La Mesa tract takes its water from the main flume line of the company, through the flume that carries the water either to the consumers or to these storage reservoirs—is that not so?

A. I understand that all water-takers from the flume take their

water at their own expense from the main conduit line of the flume company's system to reservoirs of their own.

Q. And these storage reservoirs that you refer to are storage reservoirs that were constructed at the expense either of the original owners of the tract before petition and sale of it to smaller owners, or by the consumers themselves subsequently?

A. They are excepting in the case of the two reservoirs constructed by the company, the one at the terminus of the flume where the pipe line begins that runs to San Diego, and the other the La Mesa reservoir.

Q. I am speaking now directly with reference to the supply of water to Lemon Grove. The reservoir in which the water is stored for distribution to Lemon Grove was constructed by the consumers themselves?

A. Yes sir—to Lemon Grove. Your first question however was regarding the supply for La Mesa.

Q. That was a mistake of mine. I was intending to inquire
340 about Lemon Grove. Then as to Lemon Grove, the supply of water for that community is taken as a whole from the main flume line of the flume company, and conducted through a flume line of the consumers to their own storage reservoir for distribution, is it not?

A. Through flume lines and pipe lines.

Q. None of the reservoirs constructed for the supply of water to Lemon Grove were constructed at the expense of the company?

A. They were not—each consumer being compelled to maintain his own reservoir and storage at his own expense.

Q. Now you say the flume company supplies some of its water to the city of San Diego. Do you mean that, or do you mean that the flume company furnishes water to the San Diego Water Company, or to its system, and it is by that company supplied to the city?

A. I understand that the flume company furnishes water in bulk to the San Diego Water Company, and they in turn distribute it to its water-takers in San Diego.

Q. The flume company has no storage reservoirs for the supply of water to the city of San Diego, has it?

A. It has not.

Q. And it has no distributing system inside of the city of San Diego, has it?

A. I understand it has not.

The taking of further testimony is at this time continued, by consent, until 1.30 o'clock p. m. of this day.

341 1.30 P. M.

H. N. SAVAGE resumes the stand.

By Mr. HAINES:

Q. Your computation of the cost of water to the consumers under the flume company is entirely based upon the terms of what you

consider to be the contract or form of contract which they made with their consumers?

A. Yes sir.

Q. Do you know how many acres the San Diego Flume Company contracted to supply with water at the rate of $30 annual rental per inch?

A. I do not.

Q. Do you know how many acres it contracted to supply with water on the payment of forty dollars an inch?

A. I do not.

Q. Or sixty dollars an inch?

A. I do not.

Q. You- answers were predicated upon the theory that it costs sixty dollars an inch?

A. They were.

Q. And your answers were predicated upon provisions in these contracts whereby the flume company covenanted and agreed to furnish, subject to restrictions and conditions contained in the contract, a continuous flow of water equal to 12,960 standard gallons in every 24 hours for each inch, miner's measure, under four-inch pressure; and also upon the further provision that the party of the second part, being the consumer, should not use, or permit the water sold to him to be used, on any other lands except the lands described in the contract, nor permit any water to run off on any contiguous lands, or run to useless waste; and subject to the further pro-
342 vision that the right, title, and property to all the water described, which was not actually used on the land to which the water right conveyed by the contract should be attached, should remain in the corporation, its successors, and as-igns?

A. They were.

Q. Now do you know whether or not the flume company made a practice of selling the water covered by water rights conveyed by it which was not used to other parties?

A. I do not.

Q. Either irrigators or the city?

A. I do not.

Q. Do you know whether or not the flume company ever sold its supply of water for a number of years last past?

A. I know that the flume company have not been able to supply their consumers the full quantity through these several dry seasons, both by report and from the water-takers, and by the evidence of their company's secretary this morning.

A. H. KOEBIG, being called as a witness for the complainant, and being duly sworn by the special examiner, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. What is your name?

A. A. H. Koebig.

Q. Where do you reside?

A. San Bernardino.

Q. What is your occupation?

A. Civil engineer.

343 Q. How long have you been engaged in your profession as civil engineer?

A. In the practice of civil engineering since 1876.

Q. Have you given special attention to hydraulic engineering?

A. Yes sir.

Q. For how long a time?

A. Since 1887.

Q. Are you acquainted with the various water systems for supplying water to consumers in this southern part of the State?

A. Yes sir; especially in San Bernardino Co., Los Angeles Co., and Orange Co.

Q. Have you undertaken to tabulate the costs of the various systems in this southern end of the State, the amount of their operating expenses, the amount of their charges for water, and the various other things that would enable you to make a comparison of the amount properly chargeable and the amount actually charged by the different companies for supplying water?

A. I have.

Q. Have you put the information that you have obtained and gathered together in tabulated form?

A. I have.

Q. I will ask you to look at the paper I now hand you, and state whether or not that is the tabulated statement that you have prepared? (Hands paper to witness.)

Mr. HAINES: We object to this line of evidence, on the ground that it is immaterial and irrelevant.

A. Yes sir; it is.

Mr. WORKS: We offer this tabulated statement in evidence as Complainant's Exhibit J–4.

344 Mr. HAINES: Objected to, on the ground that no sufficient foundation has been laid, and that, were it laid, the document would be immaterial and irrelevant.

Mr. WORKS: Do you mean by that to object to the proof of Mr. Koebig being an expert?

Mr. HAINES: No—as to the source from whence he makes these figures, and upon what they are based.

Q. How did you ascertain as to the facts and figures contained in this statement, so far as it represents actual facts?

A. First, by my connection with all of these companies for years, excepting the San Diego Land and Town Company and the San Diego Flume Company; second, by examining the books of the companies, with the exception of the two companies mentioned, and copying the actual figures from the books; and third, by calculation. There are a great many figures in this tabulated statement which have been received through calculation based on the facts mentioned.

Q. What has been your connection with these different companies, other than the two you mentioned?

A. I have been consulted by the North Fork Ditch Company several times. With the Lytle Creek Water and Improvement Company I have been consulting engineer for three years. By the Riverside Water Company I have been employed many times, and investigated their system in several litigations that they had before the courts. With the Santa Ana Valley Irrigation Company and the Anaheim Union Water Co. I am consulting engineer now. The Alessandro Irrigation District—I have investigated in detail both the construction and their books, expenditure, and so forth, in a case in which there was sought to establish rates by the inhabitants of Riverside county against the company. The Riverside Domes-
345 tic System I had the same connection with as the Riverside Water Company. The San Diego Land and Town Company and the San Diego Flume Company I have had no connection with whatsoever. These figures from these two companies I obtained, for the first company, from records shown to me by Mr. Savage and Mr. Boal, and also from the transcript of the evidence in the case before the board of supervisors; and the San Diego Flume Company's figures I got from evidence which was introduced here yesterday.

Q. I wish you would state what kind of a system the North Fork Company's system is, and fully, and under what conditions it supplies water to its consumers?

A. The North Fork system is a gravity system. It takes its water from the Santa Ana river by means of a brush and rock dam, of very primitive nature, and conducts the same for about eight miles around the foot-hills in a canal, which is paved with rock and cement. The consumers of the North Fork Company have to take the water from the ditch, and build their own lateral or distributive systems. The North Fork Company is a mutual company, and delivers about (520) five hundred and twenty inches of water, on the average during the summer months, and 50 inches of water during the winter months. When I speak of inches I mean a miner's inch, or an inch under four-inch pressure.

Q. Does it furnish any water under pressure?

A. It does not.

Q. Has it any inclosed pipes at all for the delivery of water or is it all open ditch?

A. It is an open stone-paved canal.

Q. With reference to the time of delivery, is the water delivered continuously, or on occasions?

A. The system of delivery in the North Fork Water Company is similar to the system which was in vogue in the early days of California—of taking so many hours of the entire flow at such and such an interval, I think in this case of seven days. And
346 the consumer has to take that flow of water whenever his turn comes, if he cannot make an interchange with a neighbor; but he is supposed to take his water at the very hour or minute, and is supposed to be through with the irrigation at the very minute of the time given to him.

Q. Do you know whether those hours cover the irrigation of the land in the night-time?

A. Yes sir—very frequently the hours cover day and night in the seven days.

Q. What is the effect with reference to that kind of delivery upon the domestic use, as to whether it is satisfactory or otherwise?

A. It is very unsatisfactory in many cases, especially during the hot season; it is harassing to the consumers. They have, to get their water during the irrigation season, either to put it in cisterns or reservoir for domestic use, or in barrels; and in either case the quality of the water is not satisfactory towards the latter part of the seven days; and it is expensive to the user.

Q. Now with respect to Lytle Creek Water Company, I wish you would explain in the same way the manner of supplying the water by that company.

A. The Lytle Creek Water and Improvement Company takes its water from Lytle creek, also by a very crude system of diversion. From there it goes into a cement canal, which is open, only cemented on the sides. That canal is about six miles long. From there it goes into a pipe system constructed out of cement pipes. The delivery to the people or consumers is made according to cards. These cards are issued on the first of the month, and everybody must be ready when his time comes. The cinquero comes and turns the water on, and when the time is over the water is turned off.

347 For the ranchers at large there is no other way of getting water for domestic use than through this system; and the same obstacle as is found in the North Fork system for domestic use applies also *the* the Lytle Creek Company. It is no pressure system; it is delivered by gravity.

Q. And that also requires irrigation at times by the different consumers during the night-time?

A. Yes sir. I can speak out of experience in that very case more than in any other, because I have a ranch in that section, and nine times out of ten we have to irrigate in the night season.

Q. How with respect to the Riverside Water Company?

A. The Riverside Water Company takes its water for irrigation from the Santa Ana river by a series of three or four different dams and three different mains. It also has water which it gets from artesian wells, and an artesian well which was lately discovered, 358 inches. The water flows in a large canal, open, but cemented on the sides, and also in a canal, the continuation of the cemented canal, without cemented sides and bottom, simply an open canal. The average width of this canal is about twelve feet on the bottom. It takes its water from there into the distribution system, which consists of a vitrified pipe chiefly, and from the mains of the vitrified pipe is turned in in open ditches as laterals. The way of distribution in the Riverside Water Company is by application to the company for so many hours of water at such and such a time. Sometimes they have to make the application ten, fifteen, or twenty days ahead before they get the water. They pay in advance with

the application, and the time when they receive the water is set. The irrigators have to take the water whenever the time is designated by the routine of the company's office; it is not at all at their own option to take water night or day. During the summer they are glad to get it at any time, as in all the other cases. This
348 system has no domestic system connected with it. It is entirely a gravity system, except whatever they save from their irrigation water in cisterns.

Q. The Santa Ana Valley Irrigation Company?

A. The Santa Ana Valley Irrigation Company takes its water also from the Santa Ana river by means of a brush and rock dam. Then it goes into a main canal, which is entirely open, not cemented; and from there it goes through many miles of lateral ditches, of which there is only a small part cemented, the balance are open ditches. It is an irrigation system in the broad way of irrigation, has no pretence whatever for domestic supply. The people go to the company—to the secretary—and also buy their water by the head of 100 inches; they have to take 100 inches or nothing, which is very inconvenient to handle. In many cases they have to prepare ahead for the handling of such water by employing considerable help which is sufficient to handle the water to advantage. These heads are assigned to the irrigators on application, and have to be applied for several days ahead. They have to take their turn either day or night, and they have to pay in advance, when they make the application, before they get the water.

This also holds good for the Anaheim Union Water Company. The Anaheim Union Water Company has only a larger amount of cemented ditches for laterals than the Santa Ana Water Company.

Q. You may go right on with the others, and explain about them.

A. The Alessandro irrigation district gets its water from the Bear Valley system. The fountain head of the Bear Valley system is the Bear Valley dam; thence the water goes down Bear creek; from Bear creek into the Santa Ana river; from Santa Ana river into the Santa Ana canal. It is diverted into this canal by a rock
349 and brush dam. The canal is about five miles long, and consists of flumes and tunnels. From there the water goes into a pressure pipe a little more than ten miles long. This pipe is a steel pipe, and is under pressure, on the syphon principle. Along this pressure-pipe line there is a tunnel about a mile long, and various smaller tunnels. Thence it goes into a distribution system of cemented canals, vitrified pipes, and in some few cases—a mile and a half of pressure pipe altogether. The consumers get their domestic water whenever there is any water in that particular lateral pipe line; they are allowed to put in a pump in the hydrants and pump the water out. Of course this water is turned from one lateral into the other in rotation, and they have perhaps only five or six days out of the month water in these laterals which they can use. The water is distributed on cards. The particular run is assigned to the irrigator, and he has to take his water during this run. And the water is accumulated, that is to say, they irrigate perhaps once or twice a month, and instead of getting one inch in four acres'

continuous flow they get at one irrigation 30 inches, or at two irrigations 15 inches for one day.

The Riverside domestic system is a system which has the primary object of furnishing domestic water to the people of the city of Riverside, but it also delivers water for irrigation. This water is obtained from artesian wells, and is conducted through pressure pipes, sheet iron or sheet steel, standard screw, of various dimensions and sizes. The pressure on that system is about from 80 to 100 pounds per square inch. I have taken this system entirely as an irrigating system because I had no the rates—that is to say, I had the rates, but they are so complicated—for the domestic system, or domestic supply, that I didn't consider them at all for domestic purposes. But I know this, that the domestic rates are much higher than the rates I have figured out for irrigation on this pressure system. And the rates figured out on this pressure system for irrigation by the company, or rates charged, are much higher than the Riverside Water Company asks for the same amount of water from their gravity system.

350

The San Diego Land and Town Company's system; as I stated before, my information comes through the records and the testimony, as well as from Mr. Savage. I examined the system however myself, in order to compare it with the others. I will describe it if you wish.

Q. You might as well describe it.

A. It begins with the Sweetwater dam in the Sweetwater valley; thence the entire system is through pressure pipes; in other words, the entire irrigation is done through a domestic system.

Q. Is it customary in this part of the country to supply water to consumers under pressure, and in such a way that they can take their water, and any quantity of water that they want, at any time that they choose?

A. I don't know of any case that that policy is adopted, except in the San Diego Land and Town Company's case.

Q. What do you regard as the advantages of that sort of system to the consumer?

A. It is both convenient and a saving. The large convenience and advantage is in getting its domestic supply; and also its irrigation supply during the daytime instead of during the night. The saving is that he is enabled to irrigate his land by a system of pipes and hydrants, and saves an amount of water which is lost in evaporation in conducting the same through furrows for long distances from a flume.

Q. Is it not quite a considerable advantage to the consumer that he can get the water at any time he desires, instead of being compelled to take it on stated occasions, without reference to the question whether it is furnished after night or in the daytime?

351

A. Certainly it is an advantage, because the growth of the trees sometimes depends on getting the water at the right time, and especially the growth of fruit depends upon that more than the

growth of the tree. I forgot to mention that. That is a great advantage.

Q. I notice that in this tabulated statement you have given in one column the cost of the different systems to which you have referred. How did you arrive at the cost of the different systems as the basis of this statement?

A. In most of the cases I had, through my connections with the companies many times occasion to go, before this investigation, cover their books, compare the cost charged, and compare the system of construction itself with my own estimates. In the Riverside Water Company's case, I got not the cost but the value—the value which had been obtained for a proceeding before the board of supervisors, in order to fix rates. I took that value, in 1897, as stated to me.

Q. Then you have in another column the value in 1897, the time when the ordinance in controversy was adopted. How did you arrive at the present value of the plants?

Mr. HAINES: Of what company?

Mr. WORKS: Of all of them.

A. The value in 1897—to fix that value I took the first cost, and from my familiarity with the system I allowed so much per cent. in each case a different one, to fix the value in 1897, based on my knowledge that material, labor, and all other incidentals which go into the construction of such a system were much less in 1897 than they were during the years when these systems were constructed. In the case of the Alessandro irrigation district, I took the value we
352 arrived at as a board of engineers when the Alessandro irrigation district people applied for fixing rates—that is, the same value which we arrived at at the time—for the petitioners.

Q. How did you arrive at the value of the San Diego Land and Town Company's system? What did you take as its present value?

A. I took as its present value 75 per cent. of the cost.

Q. Do you think, in these various cases, that you arrived with reasonable accuracy at the present value of the properties of the different companies?

A. Yes sir.

Q. Then you have a column giving the amount of water of each of these systems, in miners' inches. How did you arrive at that?

A. This is the amount of water which these systems deliver for the irrigation season, for 200 days. In the North Fork Company's case I took the contract which the North Fork Company has with the Bear Valley Company as a basis. In the Lytel Creek Water and Improvement Company's case, I took my own knowledge, because I have measured that water time and time again, and I knew what they had. In the Riverside Irrigation Company's case, the same way. The Santa Ana Valley Irrigation and the Anaheim Union Water Company—from my own knowledge, from measuring the water for many years since 1892. The Alessandro irrigation

district—that amount of water was flowing in the pipes in 1897, and delivered to the Alessandro irrigation district. The Riverside domestic system—I have measured the wells they have near Colton many times, and I know that their flow is at least 100 inches. If all the wells are on gravity flow it is 180 inches.

The San Diego Land and Town Company's system—I arrived at the amount of water which that system could deliver by taking the run-off, the rainfall, and the impounding capacity of the
353 reservoir into consideration. The data were given to me by Mr. Savage. From this amount I deducted one-fifth of the water, as I have seen, and it is claimed, that one-fifth of the water goes to National City.

Mr. HAINES: Let the reporter read that. (Reporter reads.)

WITNESS: The San Diego Flume Company—the amount I got from the testimony given here by Mr. Doolittle.

Q. Then in the next column you have the number of acres irrigated. You may explain how you arrived at that?

A. The first two—North Fork and Lytle Creek Companies—I knew by my own knowledge; but the Riverside Water Company's amount I got from the secretary, from its books. The Santa Ana Valley and Anaheim Union Companies—those I know myself. The Alessandro irrigation district—that I know by my own knowledge. The San Diego Land and Town Company—I took the 800 inches and multiplied with 7 4/10 or thereabouts, giving me 6000 acres. From that I deducted the amount which would be irrigated by one-fifth of the water, and got 4,800 acres.

Q. That is the one-fifth that you have calculated to go to National City?

A. Yes sir. The San Diego Flume Company—I took the 800 inches and multiplied with 15, as one inch to 15 acres is stated in the testimony.

Q. Then you have in the next column the number of acres to one miner's inch. How did you arrive at that, that is, the amount of the number of acres?

A. I divided the number of acres irrigated by the number of miners' inches obtainable. In many cases I didn't need to do it, because I knew by heart what their delivery was, how many acres they were to irrigate for each inch.

Q. Then you have in the next column the cost per thousand gallons, as for the value in 1897. How did you arrive at
354 that?

A. I took the number of inches delivered for 200 days; then I took the number of inches delivered for winter use for each company, which is not shown in this list, but which would be like this:—The North Fork, 50 miners' inches; the Lytel Creek Water and Improvement Company, 50; Riverside Water Company, 500; Santa Ana Valley Irrigation Company, 500; Anaheim Union Water Company, 300; the Alessandro irrigation district, 50, and the San Diego Land and Town Company, 50. These 50 inches in the case of the San Diego Land and Town Company is based on my own judgment for winter irrigation. I took both the amounts,

and figured out the number of gallons delivered, divided that into the sum of the operating expenses plus 6 per cent. of the value of 1897, and thus got the cost per thousand gallons, that seems to me, not the cost per dozen gallons.

Q. You have it entered here, cost per thousand gallons, valued in 1897.

A. Yes sir; that is right—let me see—no, I must retract the entire operation—the cost per thousand gallons—I figured the cost of construction per——

Q. Do you wish to strike out the other answers?

A. Yes sir. I must beg your pardon. I got on the wrong line.

Mr. HAINES: This heading ought to be, according to your statement, Cost of construction per thousand gallons?

WITNESS: Cost of construction per thousand gallons. That is really what it would mean, on the value in 1897. I took the value of the system in 1897, and divided it by the number of thousand gallons the system is capable of delivering, both during the winter and summer months.

355 Q. And that gave you the result, as to each of the companies, that is shown in your column: Cost per thousand gallons, value of 1897?

A. Yes sir. In other words, one thousand gallons, to produce it, on the value of the system in 1897, would cost the figures as given in that column.

Q. To the company?

A. To the company.

Mr. HAINES: Take the case of the North Fork Company, for instance, that is $9.62; and that is the amount of capital invested for the purpose of delivering a thousand gallons—is that it?

WITNESS: A thousand gallons—yes sir; that is the first cost.

Q. Your next column is: Six per cent. on value in 1897. I presume that simply calculates the interest allowed by the statute as the minimum amount on the valuation you fixed in 1897?

A. Exactly.

Q. Then you have in the next column: Operating and maintenance in 1897. Where did you get those figures?

A. They were got in a similar way, identically the same way as the cost of the system.

Q. Then the next column is the amount charged per thousand gallons for 24 hours, in the case of each company. How did you arrive at that?

A. I took the number of inches for 200 days, added to that the number of inches delivered during the winter season, reduced it to thousand gallons per day and divided the sum of the expenses plus the six per cent. of the value in 1897 by that figure. I would like to correct in that statement in the Riverside domestic sys-

356 tem: Amount charged per thousand gallons for 24 hours, $3.76; that ought to be stricken out.

Q. What should that be?

A. I don't know. I didn't get the amount charged.

Q. That wants to be erased entirely?

A. It wants to be erased entirely.

Q. With reference to the amount chargeable you made your calculation in the next column?

A. Yes sir.

Q. And the one amount charged per thousand gallons is the amount actually charged by the companies?

A. Actually charged by the companies.

Q. Then what you said with reference to the manner of arriving at the amount relates to the amount chargeable?

A. Yes sir—relates to the last column, the amount chargeable.

Q. In that column, where you have $3.76, in the case of Riverside, is that to be left in?

A. In the amount chargeable it ought to be left in; in the amount charged it should not be left in.

Q. Now with reference to the amounts actually charged by these companies, in what manner and in what way does the North Fork Company make its charge?

A. The North Fork Company simply takes its maintenance, repairs and salaries and taxes and other incidental expenses, and divides it up among the water-users in accordance and in proportion to the water used.

Q. Does that actually amount to 44/100 of a cent per thousand gallons, as you have it here?

A. It is the actual amount they have charged in 1897.

Q. In the case of the Lytle Creek Water and Improvement
357 Company, in what way do they charge?

A. It takes its expenses, whatever they are, construction and mainten-ce and so on, and adds that to six per cent. of the value of the system. The value of the system they have fixed at a certain figure, and divided up, and charged the amount upon the water used; and they charge, upon the expenditure of $78,000 as the cost of their system, they charge 1 1/10 cents per thousand gallons. It is not the cost of the system; they have some depreciation every year.

Q. They take the actual value?

A. They take the actual value every time.

Q. Then in the Riverside Water Company—how do they make their charges.

A. The Riverside Water Company—I do not know. They just charge 15 cents for a miner's inch per 24 hours flat.

Q. Have you figured out what that would amount to in furnishing the quantity of water they had per acre for the number of acres? Does that figure out the amount you have stated, 1 16/100?

A. 1 16/100. You observe the amount chargeable, in the same way as I figure expenses and six per cent., is less than the amount actually charged.

Q. That is so. They actually charge 1 16/100, and your figuring would make the amount 90/100 of one cent per one thousand gallons?

A. 90/100 of one cent.

Q. Is it a fact that some furnish one inch to five acres, while another furnishes one inch to ten, and another one inch to three?

A. That is true. Riverside, one inch to three.

Q. And furnishing one inch to three acres of land, their charge is 1 16/100 cents per thousand gallons?

A. For 24 hours—yes sir—1 16/100.

358 Q. In the case of the Riverside Water Company, I see that in their rules and regulations for the year 1897 they make a distinction between their charge for water furnished under pressure, and for water furnished not under pressure. The section is as follows:

SECTION 3. Water for irrigating purposes shall be delivered to consumers by the Riverside Water Company at the following rates, to wit: $2.50 per acre per annum for all lands using water, except lands supplied with water by pressure pipes from the canal, and 10 cents per inch for all water delivered by measurement to such lands from the canals during the months of March, April, May, June, July, August, September, October, and November, and five cents per inch for water delivered during the months of December, January and February; and ten dollars per acre per annum for all lands supplied with water by pressure pipes from the canals, not including lawns and flowers. Do you know whether that rates is now in force?

A. The rate was changed by the board of supervisors since then to 15 cents per inch for 24 hours, and 45 or 50 cents per inch under pressure—I am not as sure of that figure as I am of the 15 cents rate, but it is between 45 and 50 cents per inch for 24 hours, for water under pressure.

Mr. HAINES: How many gallons to the inch?

WITNESS: 12,960 gallons.

Q. In that company, which seems to be the only one where water is furnished in part under pressure, they make a large extra charge on that account?

A. Yes sir; they put it on the same basis as the domestic supply.

Q. Then we have in your last column: amount chargeable for expenses and six per cent. You mean by that, a charge sufficient to pay the operating expenses, and return six per cent. on the value of the plant, as you have figured it?

359

A. Yes sir; that is it.

Q. And these figures that you have given in the column show *show* how much must be paid in each case per thousand gallons to meet the operating expenses and pay six per cent. on the value of the plant, as you have stated?

A. Yes sir.

Q. Will you explain now how you arrived at those figures?

A. The amount chargeable and six per cent.?

Q. Yes. You can explain it in this connexion?

A. I took the amount of water delivered during the 200 days of the irrigation season, and also the amount of water which was delivered by each company during the 165 days of the winter season, figured

this amount into gallons, and reduced it to number of thousand gallons for 24 hours.

Mr. HAINES: How many do you make it in this case?

WITNESS: There is not any particular case before me. Judge Works just asked in general.

Mr. HAINES: Excuse me.

WITNESS: Then I took in each case the six per cent. on the value in 1897 as a chargeable interest on the plant, added to that the running expenses of each company, and divided it by 365. So I reduced the expenses to the daily expense, and divided that by the number of thousand gallons. That gave me the number of cents chargeable for a thousand gallons for 24 hours. In no case did I take into consideration the deterioration of the system.

Q. Now, if I understand you, on that basis of figuring it would be necessary, in order to return to the San Diego Land and Town Company its operating expenses as you get them from the
360 officers of the company and six per cent. on the value of the plant as you have arrived at it, it would take three cents per thousand gallons of water delivered to make that return?

A. Yes sir.

Mr. HAINES: When you say that "in no case did I take into consideration the deterioration" you don't mean to say you didn't include in the expenses the annual repairs.

WITNESS: I included the annual repairs; but the annual repairs do not mean a deterioration in the system.

Q. We will come to that later. Then, according to this tabulated statement that you have made, figuring upon all of these companies in the same way, the only other company that would require payment of as large a sum per thousand gallons as the San Diego Land and Town Company is the Riverside domestic system?

A. Yes sir.

Q. And that system furnishes water also for domestic purposes?

A. Yes sir. I have taken, as you see, the Riverside domestic system on the basis of an irrigation system entirely.

Q. In getting at the amount that should be paid by a consumer outside of National City, in arriving at this three-cent rate, what deductions did you make on account of value upon the plant in National City and upon the amount of water used?

A. I deducted $180,000 from the first cost; then I deducted one-fifth of the water as the water going to National City.

Q. And what did you deduct from the present value?

A. From the present value I deducted $135,000.

A. From the present value I deducted $135,000.

Mr. HAINES: Is that for the value of the system attributable to National City?

Mr. WORKS: Yes. You know there is a part of the amount paid by National City, $11,000 The effort was to deduct from the
361 system the amount of the plant that was devoted to the supply of water to National City, as well as the amount of the water that went to National City, in trying to arrive at what would be the proper rate per thousand gallons for the outside.

WITNESS: Then I deducted from the sum of the six per cent. and the operating and maintenance $11,412, in order to arrive at the six per cent. and maintenance of the balance of the system.

Q. That is, you took from the amount the total amount that the company realized from the ordinance rate in National City?

A. Yes sir.

Q. Is it possible to meet the expenses of the company and return it six per cent. interest upon a rate of one cent per thousand gallons?

A. You mean the San Diego Land and Town Company?

Q. Yes sir.

A. It is absolutely impossible.

Q. Could it be done, in your judgment, on a rate of two cents a thousand gallons?

A. It might be done; but the speedy collapse of the system, in my opinion, would be the result of it.

Q. In making these figures, giving the exact amount properly chargeable in each of these cases, or in the case of each of these companies, to meet the operating expenses and the six per cent., you take there no account of the superior advantages of the consumers in the case of the consumers of the San Diego Land and Town Company by reason of their water being supplied under pressure, as you have stated?

A. I did not.

Q. Then, under that statement of the amount that is properly chargeable, so far as the actual value of the services to the community is concerned, it would be much greater, would it not, in the case of the San Diego Land and Town Company than in the
362 other cases, by reason of the fact that the water is furnished under pressure, and is at command at all times to be used?

A. Yes sir.

Q. With respect to the depreciation, you have not taken that into account at all in any of these figures?

A. Not in any of these.

Q. Do you know what the general effect of the soils is here upon the pipe lines of a company of this kind?

A. Yes sir; I do.

Q. Have you made any special study of that subject?

A. I have, more especially within half a year I have been examining many miles of pipe lines of different kinds, iron pipe lines, through different soils.

Q. What was the occasion of your making that special investigation of the subject?

A. The largest investigation of that subject I made in Los Angeles; a smaller one I made in the city of San Bernardino. I have not only examined the pipe in trenches, but also I have cut out segments of the pipe, sections of the pipe, about four hundred, in different classes of soil at different ages, examined the influence of the soil upon these iron pipes outside as well as the influence of the water inside.

Q. What was the occasion of making that investigation at Los Angeles?

A. To make an appraisement for the city of Los Angeles of the city water works.

Q. Who was engaged with you in that investigation?

A. Mr. Schuyler, Mr. Adams, and Mr. Lippincott.

Q. What is the effect of such soils as you find in and around Chula Vista and National City upon pipe lines?

A. This red sandy loam, or red clay substance, is the worst
363 class of soil, except one, that I have encountered, and the life of an iron pipe in that class of soil is in the extreme about 15 years, according to our experience, and may not be longer than 12 years.

Q. Have you had any occasion to know what the effect is upon the calamine pipe?

A. Yes sir. In San Bernardino city our entire system is laid with calamine pipe, and I have examined for the board of trustees and for the tax-payers the result or effect of the soil there. That system was laid in 1892, and in the condition it is at present I don't give the system in entirety a longer life than four years hence.

Q. It has been in how long now?

A. From 1892. Seven and four is eleven years.

Q. Now with respect to cast-iron pipe?

A. They last much longer. The probable life in this soil of cast-iron pipe is between fifty and 75 years. Here in America we have no cast-iron pipes yet long enough in the soil to have any actual demonstration. But we have received these demonstrations from European cities, especially from Hamburg and from London and other cities. We can only judge from the examination of the pipe here in the ground and the effect of the soil upon the same for the length of time they are in the ground.

Q. Is the cast-iron pipe affected seriously by the action of the soil?

A. Yes sir; it is. I have seen cast-iron pipe which has been laid in Los Angeles 30 years it may be there was some defect in the casting making the pipe particularly weak at that point, but the pipe was all perforated and eroded; so that pipe in thirty years has had a very serious effect produced on it by the soil.

364 Q. *It* it possible to make good the deterioration that ensues in a case of this kind by the repairs that are made?

A. No. By repairs you can keep up—diligent repairs—you can keep up the efficiency of the system until the bulk of the pipe is so perforated that clamps and other means of stopping leaks become impossible. Even if you want to use a system of that kind in that soil for any length of time, even for fifteen years, you have to make continuous repairs to stop the leaks; but towards the end of that period the only repair you can make is to put in a new pipe.

Q. Then so far as the pipe you first mentioned is concerned, it would have to be replaced through the entire system probably within fifteen years?

A. Yes sir.

Q. And that would be so, no matter now much had been done in the way of repairs?

A. Yes sir—that is, on the supposition that it is lying in this bad class of soil.

Q. Have you made any investigation of the soil here so that you know personally what the nature of the soil is here, whether it is destructive or not?

A. I have, Sunday, in connection with Mr. Savage, going through the tract, going towards Sweetwater dam.

Q. Do you find it is of that class of soil that is particularly destructive to the pipes?

A. It is identically the same soil which we have on our mesa lands around Riverside and San Bernardino; and on investigation of the Riverside Water Company's pipes last year we came to the conclusion that those particular pipes would not last over ten years.

Mr. HAINES: What particular pipes?

365 WITNESS: Of the Riverside Water Company—sheet iron or sheet steel.

Mr. HAINES: Are they similar to these here?

WITNESS: Yes sir; they are identically the same.

Mr. HAINES: How many years?

WITNESS: Altogether the life of the pipe would not exceed ten years.

Q. I want to ask you something about some of these larger companies, as to the amount per acre that is paid for the use of water. You have given here the amount per thousand gallons. Do you know what the case is with reference to the Riverside Water Company—what the charge per acre is, or what it amounts to?

A. It amounts to $11.04 per acre per annum.

Q. And the Anaheim Union Water Company—do you know what that is?

A. It is $4.76 per acre per annum.

Q. And the Alessandro irrigation district?

A. $9.55.

Q. And none of these, I understand you to say, are furnishing *ware* under pressure, except as to a part of the system of the Riverside Water Company?

A. And part of the Alessandro irrigation district is pressure pipe, but a very small part.

Q. The others, you say, are all by gravitation?

A. Gravity systems.

Q. What means have been provided, in the case of the water companies other than the San Diego Land and Town Company and the San Diego Flume Company, for the storage of water?

A. There are no facilities for storing water in either of those companies I mentioned, except the Alessandro irrigation

366 district, and partially the North Fork. You understand, Judge Works, that the North Fork Company was a prior owner in the flow of the Santa Ana river. The North Fork Company itself has no right in the storage capacity of the Bear Valley reservoir, but the Bear Valley reservoir has guaranteed a certain

flow to the North Fork people providing they would allow them to store the water on the water-shed of the Santa Ana river.

Q. To that extent they get the water from the storage reservoir of the Bear Valley system?

A. Yes sir.

Q. But that company has no storage facilities of *irs* own?

A. None whatever.

Q. And have any other of the companies you mentioned any storage reservoirs, or any facilities for storing water other than the Alessandro?

A. The Alessandro is similar—in a similar way as the North Fork. The Alessandro irrigation district, as a district, has no storage facilities; it only participates in its proportion of the water—in the benefits of the Bear valley.

Q. Then as to these other companies they are at no expense in providing for the storage, or storing water for the benefit of their consumers?

A. It is either flowing water, or water from artesian wells. About the San Diego Flume Company, I should like to qualify that statement: I don't know about that.

Q. I left that out of the inquiry. We all know, and it has been shown here how it provides water.

—. ——.

Q. Could the water be supplied through the system of the San Diego Land and Town Company without the expense of providing for the storage of water?

A. From the run-off chart I had given to me I came to the conclusion there would be no water without a reservoir during the summer time.

367 By Mr. HAINES—Cross-examination:

Q. Are you acquainted with the Gage system at Riverside—with the Hemet system?

A. No: I have never been up to the Hemet system.

Q. I believe you have not included the Gage system?

A. I did not.

Q. Why not?

A. Because Mr. Frazier, a friend of mine, the secretary, objected to giving any information, and asked me not to give any information for public use. He said they were a close corporation, operated by people from abroad, and they liked to keep their affairs to themselves.

Q. It is a public water system?

A. I don't think so.

Q. Does it not furnish water to the public?

A. No: only to its stockholders.

Q. It is a mutual system?

A. It is a mutual system.

Q. Do you know what water costs the consumers under that system per acre per annum?

A. They don't sell water; I know that much. They sell the water

and the land, and then they divide the expenses annually among their stockholders as an assessment.

Q. In other words, the Gage Company, if we may so call the corporation—what is the true name?

A. The Riverside Trust Company Limited.

Q. That is the real name of what is popularly known as the Gage system?

A. Yes sir. Mr. Gage sold out several years ago to the company.

Q. Now the system that that company has adopted is that
368 of a land and water company, and it sells its land with water rights annexed, does it?

A. Yes sir.

Q. And the cost of construction, or whatever is demanded by the company in that behalf, is included in the price of land and water right?

A. Yes sir. The cost of construction, water lands,—they derive their water from artesian wells—and so forth, which they paid to Mr. Gage, was over $1,800,000. That included the water land, the main canal, and several laterals, but very few, and a certain amount of dry acreage land without water.

Q. That is, land upon which the water was to be used?

A. Yes sir. But the real segregation of that figure I could not give you, because I did not succeed in getting it from the company; and where I could have learned those figures, in the suit of Gage vs. The Riverside Trust Company, they were not given at the time I was in court.

Q. You say, owing to the fact that the land was sold together with the water rights by the company to purchasers, the charge to purchasers, per annum, for their water used for irrigation is confined to what is necessary to be raised, or to the proportional part which each irrigator should pay of the expenses of maintenance, repair, and the like?

A. Yes sir.

Q. And not anything by way of return upon capital?

A. None whatever—I don't think so. That was Mr. Frazier's answer to me; I could not go any further then.

Q. Do you know what the annual rates are paid by the consumers under that system?

A. I do not.

Q. You know nothing about the Hemet system?

A. I do not, only in a general way about the dam; that is
369 all I know.

Q. Now this North Fork Company, you say, is a mutual company?

A. That is a mutual company—yes sir.

Q. Detail in a general way how it is organized?

A. Do you mean the original or the present organization?

Q. As it now exists, as you testified about it.

A. It is a company consisting of a certain number of stockholders. I don't know whether I have the number of stockholders—I will see. (Consults papers.) No, I have not. Each of the stock-

holders is entitled to so many hours of the entire flow of the North Fork. They assess——

Q. Is that proportioned to the number of acres of land he has?

A. No sir; it is ownership in the water.

Q. Is the water owned in proportion to the owners' acreage in land?

A. No. The water was owned first by appropriation by a number of people—appropriation under the law of California; and then they formed a company, and those who had larger holdings in the company sold off to those who had not, and so the ownership in proportion to the acreage of land is somewhat irregular.

Q. You say "somewhat." Does it not generally correspond to the acreage?

A. No, I don't think so. It is an ownership of so many hours of the flow. It is the old style of irrigation company which was in vogue in California, I understand, years ago.

Q. Is it a corporation?

A. It is a corporation—yes sir.

Q. Are there shares?

A. No: there are no shares. There are hours—hours of water.

Q. Does not each member of the corporation own certifi-
370 cates, shares, in the corporation?

A. I think they do; and these certificates represent hours of water, similar to the Grafton Company, and others in this country.

Q. The result of it is that they assess themselves for the expenses of maintenance, operation, and the like?

A. Yes sir.

Q. And have nothing to raise by way of interest on capital?

A. They owe money, to my knowledge.

Q. That is, they have a corporate indebtedness?

A. Yes sir; and pay interest on that.

Q. And when you put under the last heading of this sheet: amount chargeable—expense—six per cent.—for 24 hours per thousand gallons 44 cents—do you mean that that includes what is paid by way of maintenance and operating expenses, and also to raise a fund to apply on the interest or principal, or both, of the debt?

A. Yes sir; I mean to include the entire debt. That is coincident in this case, the amount chargeable, theoretically figured, and the amount really charged is really about the same. They have no connection with each other however.

Q. What is this six per cent. that you have included in respect of this company?

A. I have treated it on the same basis as all the rest of the companies in this theoretical charge, under the idea, taking the minimum rate of interest the law allows on the valuation and the expenses in order to get some unit of comparison.

Q. By gravity systems as you have classed them here, you mean one where gravity, without any pressure from a reservoir or the like, is the propelling force?

A. Yes sir; I mean an open system, which discharges itself by

gravity, without having any pressure at any part or the whole
371 of the system.

Q. Except such as is afforded by the descent from the time it enters the system to where it discharges?

A. Well, that would give not the meaning of the word pressure, when it just runs down in its course by gravity, as all other water would run down hill.

Q. Now the Lytle Creek Company—what is its corporate organization?

A. That is a water company organized for the operation and maintenance of the water connected with the land. It has five thousand stockholders, and is a corporation under the law of California, I think.

Q. Are the stockholders owners of the land irrigated under the system?

A. Yes sir; one share goes with an acre of land.

Q. That is a case where the ownership of land and water are united?

A. Yes sir.

Q. The water is diverted from Lytle creek, is it?

A. Yes sir.

Q. And from whom did you get the cost of the system?

A. The cost of the Lytle Creek system I have made several estimates upon myself, for the San Francisco Savings Union, and also got a statement from the secretary of the company and compared it with the statement I have. As I stated before, I have been the consulting engineer for five or six years for that company.

Q. Do you know whether that company has any corporate indebtedness?

A. I rather think they have a small one, but I don't know exactly how much it is.

372 Q. Is the term "mutual company" applied to this last company, Lytle Creek?

A. I never heard it, but I should judge it is. They are not operating for profits; I know that.

Q. That is, not for corporate profits?

A. Not for corporate profits.

Q. The individuals work for their own profit, and have the land and water united?

A. Yes sir.

Q. The Riverside Water Company is organized—how?

A. I think the Riverside Water Company is also organized under the law of California, if I am not mistaken it might be some other State, but it is organized under some State law. And a man who buys an acre of land has to come to the company and buy two shares of water, that is to say two shares of stock in the company.

Q. That is what is called popularly water stock, is it?

A. No. I think the Lytle Creek is water stock, while the Riverside is corporate stock, although I am not sure of that.

Q. They are both corporations?

A. Both corporations.

Q. So that stock in either is corporate stock?

A. Yes sir. There is only one distinction between the two: in the Riverside Water Company's case, before you get any water after you buy your stock you have to buy your run; in the Lytle Creek Improvement Company's case, when you buy your stock that entitles you to yo-r run, and all you have to pay then is your annual or semi-annual assessment.

Q. That is after all a mere difference in detail in collecting the annual rates, is it not?

A. You may be a stockholder in the Riverside Water Com-
373 pany and never get any water if you don't wish it. In the Lytle Creek Company you get the water; at least it is there for you to take.

Q. Is it not in the Riverside Company also? If you buy stock are you not entitled to water?

A. Yes sir; it is there to take, but it is not considered until you make application for it.

Q. It is simply a matter of detail in delivering water?

A. Yes sir; and you have to pay for that extra whenever you take it.

Q. That is, you pay for a given amount of water, to which you are entitled at the time you apply for it?

A. Yes sir.

Q. Well is the Riverside Water Company, as you express it, in the business for the purpose of making money as a corporation out of the consumers other than to meet its obligations?

A. I don't know; but their statements so far have always shown a balance. That is all I know. I don't think they are in the business to make money; they simply are in the business to deliver water and balance the expences with the income.

Q. Do you know what the corporate debt of the Riverside Water Company is?

A. It is very large. It was at one time, the bonded indebtedness, about $800,000 I should judge, but since then they have refunded and paid back a great deal.

Q. This Riverside Water Company as now organized, is the successor to a corporation that was in the business of selling water for the purpose of making money out of it, is it not?

A. Yes sir. The Riverside Land and Water Company, I think it was.

Q. And after a good deal of litigation the present company came into an arrangement with the old Riverside Land and Water
374 Company and bought the system, did it not?

A. Yes sir.

Q. The old Riverside Land and Water Company took and held considerable of the stock in this company, did it not?

A. They held it at one time, if I remember right.

Q. Together with some land which went into the general assets of this new company?

A. Yes sir.

Q. And as they sold their land, the water stock or interest they had in the corporation passed with the land?

A. Passed with the land.

Q. *Pari passu.* Now the Santa Ana Valley Irrigation Company is a corporation organized upon what basis?

A. Very similar to the Riverside Water Company, almost identical. So is the Anaheim Union Water Company.

Q. Do you know whether the Santa Ana Valley Irrigation Company has any corporate indebtedness?

A. I do not know; but I think if any it is rather small—yes sir—I know it is a very small one, if any, only to cover some running expenses from time to time.

Q. Do you know whether the Anaheim Union Water Company has any corporate debt?

A. I think they have; I think they have a large corporate debt. Allow me a moment and I can give you a little more detail on that.

Q. Can you give details on the Santa Ana?

A. No: I have not got the statement; it was not prepared at the time I left. But the Anaheim reports I got. I am pretty well satisfied there is a bonded indebtedness on the Anaheim Union Company, an indebtedness of some $99,250. Beside that they had a running indebtedness of about $16,000, but that has been
375 paid out of the annual assessment.

Q. Alessandro irrigation district is a district formed under the laws of California?

A. Yes sir; and in a state of transition just now, trying to dissolve itself and commence anew again.

Q. It has had great trouble with the Bear Valley system about its water, has it not?

A. Yes sir. I was employed by the Alessandro irrigation district in that controversy myself to show the value of that portion of the Bear Valley system which was tributary to or instrumental in delivering the water to the Alessandro.

Q. The Bear Valley system broke down in respect to furnishing water to this district, did it not, largely?

A. Yes sir. They promised, I should judge, about four thousand inches; they delivered 700.

Q. And have they been able to deliver that continuously since 1893?

A. They have, until the last dry years.

Q. How many years?

A. Say the last two years; that is to say, last year and this coming year. I am satisfied that in the year 1899, or the summer of 1899, they will get no water.

Q. How much did they get in the summer of 1898, the season of 1898, for irrigation?

A. The last year I could not tell you exactly how much they got, but they got very little, say, about 200 inches I should judge.

Q. The Riverside domestic system is organized—how?

A. That is a portion of the Riverside Water Company; but that

is largely organized for gain, that is to say, it furnishes water to anybody who pays the price and has connections; and in consequence thereof the stockholders of the company are one thing and
376 the consumers another.

Q. It furnishes Riverside, does it not, with water?

A. Yes sir.

Q. It was primarily organized for a domestic system, as you have called it, was it not?

A. Yes sir; but they furnish considerable water for irrigation You may call it "fancy" irrigation—on the heights and higher places.

Q. That is, throughout the town of Riverside for the grounds, pleasure grounds, and home grounds, and the like, principally?

A. Yes sir; and also to some orchards.

Q. Some orchards out of reach of the other systems?

A. Out of reach of the gravity system.

Q. Do you know whether it has any corporate indebtedness?

A. I do not know.

Q. It is a pressure system, that is, the water is confined in pipes?

A. Confined in pipes, and delivered under pressure.

Q. Where does it get its supply?

A. In the bed of the Santa Ana river, between Colton and old San Bernardino.

Q. Is the water pumped, or merely diverted?

A. It is gotten by artesian wells?

Q. It is supposed to be a superior water for domestic uses to the water in the Riverside Water Company's canals, is it not?

A. It is much better water than the Santa Ana River water.

Q. That is the water which supplies the Riverside Water Company mainly, is it not?

A. Yes sir.

Q. In the column of costs with respect to North Fork Com-
377 pany, how do I understand that you arrived at your estimate of it?

A. I got my own knowledge, as I had to go over it many times to appraise it; and then went to the secretary, Mr. Boggs, and I got his statement of the cost and compared it, and adopted $48,000 for the cost of the system. There were some expenses in the cost of the system which I eliminated as injudiciously expended money, and I cut it down, the expenses shown by the books.

Q. So you make the value in 1897 $38,400?

A. Yes sir.

Q. What was the purpose of inserting here, in the case of a mutual company, all interests in which are owned by the irrigators, the value and cost of the system—to get a theoretical figure?

A. To get a comparison, and a unit to compare the charges between these systems and the system San Diego Land and Town Company.

Q. And the same applies in the case of the Lytle Creek Water Company, as to the cost, and the value in 1897?

A. Yes sir.

Q. You gave no estimate of the cost of the Riverside Water Co.?

A. I took the value of 1897, as was testified to before the board of supervisors and the city trustees in Riverside?

Q. By whom?

A. By the company.

Q. Did you take the value as testified to by any one else?

A. They made a compromise—the water-users and the company admitted that that would be the value of that system.

Q. And the Santa Ana Valley Irrigation Company—you put the cost and the value at the same figures?

378 A. Yes sir. There is a company which has been more judiciously handled in its construction than perhaps any other company in Southern California, and everything they have done was done at the very lowest rate. So I could not see any chance of making a deduction from the cost for the value in 1897.

Q. The Anaheim Union Water Company—that was also—you say, a mutual water company?

A. Yes sir.

Q. And you have made one estimate for cost and another for value. On what basis did you scale down the value in 1897 from the cost

A. Because the reverse holds good for that company which holds good for the Santa Ana Valley Irrigation Company—everything was done injudiciously, very expensively, and a great deal of money was wasted. Then I made my own estimate of the cost of the property, taking there the prices they paid, and finding that these prices were so much higher than the prices which were paid for the same material and labor in 1897 I scaled it down much more than any other company.

Q. In the case of the Alessandro irrigation district you give no estimate of the cost?

A. No.

Q. Why?

Q. I took the value which the board of engineers, of which I was a member, fixed for the people who applied to the board of supervisors, and afterwards the court, to obtain rates on.

Q. Obtain rates from whom?

A. Have the rates fixed to be charged by the company; in other words, I appeared for the plaintiff, with the engineers.

Q. You mean to say that the Alessandro irrigation district applied to the board of supervisors to fix rates?

379 A. Yes sir. And the case was appealed from the decision of the board of supervisors, and has been heard before a commissioner in Judge Ross's court, and is today still in the court undecided I can give you the cost as we made it, if it is of any interest to you.

Q. This Alessandro irrigation district is a district under the Wright law, is it not?

A. Yes sir.

Q. Who applied in this case that you speak of for the fixing of rates?

A. Some of the irrigators in the district and some of the citizens of Riverside.

Mr. WORKS: That was a proceeding against the Bear Valley Company, not against the district itself.

Mr. HAINES: Oh.

The WITNESS: They applied against the Bear Valley.

Q. Oh yes. They had a contract with the Bear Valley Company, did they not, this district?

A. Yes sir; they had at one time a contract—that is true.

Q. And that contract was supposed by the circuit court of the United States to be good for nothing—is that it?

A. That is it.

Q. And so the district applied, that is to say, was a party to the application, or it was in its interest and the interest of the people resident therein, to the board of supervisors to fix rates at which the Bear Valley system should furnish it water—is that it?

A. That is right.

Q. How did it become material in that application, as against the Bear Valley Company, to ascertain the value of the property of the irrigation district?

380 A. We did not obtain the value of the property in the irrigation district; we obtained the value of the plant; and it was very much needed to fix that value for this reason: the conduit leading from the Santa Ana river to the pressure pipe to which I have referred, has a capacity of 12,000 miners' inches and 6000 miners' inches; the Alessandro irrigation district only obtained 700 miners' inches, and the Perris irrigation district obtained 200 miners' inches through the same conduit.

Now the Bear Valley said: "You will have to pay us for the maintenance of this conduit; also you have to pay us an interest on the construction account."

Q. Did this conduit you speak of constitute any part of the works of the Alessandro irrigation district?

A. Yes sir.

Q. Or was it a conduit built and maintained by the Bear Valley system?

A. I will have to go back to answer you. The new Bear Valley Improvement Company claimed the ownership of this conduit, claimed the ownership of all the pipe lines and everything, and claimed the right to charge the people living in that district a certain amount of money for the delivery of the water, disregarding these prior contracts entirely. Now we obtained the value of this irrigation system, for the value in 1897, for the Alessandro people. And this is the value I give you here. Upon this value the board of supervisors decided to allow a charge of about one cent per thousand gallons for 24 hours. Our side after deliberate consultation refused that charge, and asked that the charge be fixed at 1 24/100 (1.24) of a cent; and this is the charge which is now in vogue, under protest from the Bear Valley Company. The Bear Valley claimed a charge equivalent to about 2½ cents (2.5).

381 Q. Who built this system?

A. The Bear Valley Irrigation Company.

Q. Under contract with the irrigation system?

A. The system was built as a channel water-delivery system, and for part of the water which could be delivered to it the Alessandro irrigation district and the Perris irrigation district made contracts. The balance of the carrying capacity of that system belonged to the Bear Valley Irrigation Company.

Q. Now please state what works were included in this valuation of the Alessandro irrigation district, stated at $215,000?

A. First, an impounding capacity in the Bear Valley dam and reservoir; then a diverting dam and headworks at the Santa Ana river; then five miles of canal, called the Santa Ana canal, or the Morino canal, consisting of flumes, tunnels sand boxes, pressure pipes, junctions and so forth.

Q. This would have been aptly described, would it not, as that part of the Bear Valley system used for irrigation in the Alessandro irrigation district?

A. Yes sir.

Q. How do you arrive at the valuation of the Riverside domestic system?

A. The same way that I arrived at the valuation of the Riverside Water Company—by taking the amount which was agreed upon by both sides that the value was in 1897, when they fixed the rates for domestic water; I have forgotten the date.

Q. That is, the city?

A. Yes sir; the city of Riverside.

Q. When you come to the San Diego Land and Town Company, how do you fix its value in 1897?

A. I took Mr. Savage's and Mr. Boal's information as to the cost of the system, $1,026,000. From my examination of the system
382 on the ground, and looking over the maps and the reports I made up my mind that in 1897 that system could be reconstructed for about 75 per cent. of its cost value; and I took 75 per cent. of its cost value, $1,026,000, giving me $769,500. From that I deducted $180,000, or rather from the first cost I deducted $180,000, and from the valuation in 1897 I deducted 75 per cent. of 180,000, and that gave me the value of the system, exclusive of the National City water system.

Q. Now what do you mean by the National City water system?

A. The system has been adjudicated upon, I think, by the trustees of National City, or some proceeding in National City, and I understand the rates were fixed.

Q. Whom did you get this figure from, $180,000, as being the cost?

A. Mr. Boal and Judge Works.

Q. Now did they not give you that as being the cost of the pipe line within the limits of National City?

A. I understand I got it for the entire cost which had been adjudicated upon priorly in the National City case, whatever that was.

Q. Now if it should be true that the company in its statement

here, laid before the board of supervisors and also made part of the evidence in this case, stated that the cost of the pipe line within National City was $183,753.90, and that is what they meant in giving you that statement, your statement would not be correct here, would it?

A. Not to the extent of the difference, $3,790 and some 83 cents, or whatever it is.

Q. If this $180,000 in round numbers is the value of the pipe lines in National City, would not the proportion of the works outside of National City, consisting of so much of the reservoir, and pipe line from thence to the line of National City as is used
383 and useful for furnishing water to National City—should it not be included in the estimate of the cost of the system and the value of the system referrible to the city of National City?

A. I took it to be included. If it is not of course those figures would stand corrected to whatever there is included. I don't know; I took it for being included.

Q. Your estimate of the present value of the system is entirely based upon a percentage of what is stated to you to have been the cost of the system?

A. Yes sir; on these figures as I have stated here.

Q. You have not based your valuation in 1897 in any degree upon what it cost the present corporation by purchase at judicial sale?

A. No.

Q. Have you considered at all in your estimates relating to the San Diego Land and Town Company the question as to whether the irrigators under that system owned any water rights under the system?

A. In no case have I considered in this statement the ownership of any water right. I just considered the expense and operation.

Q. That is, you have made a valuation upon the system upon the theory that the corporation was entitled to six per cent. upon the estimated value in 1897?

A. Yes sir.

Q. And the same is true of the San Diego Flume Company, is it?

A. It is.

Q. Now I must trouble you to explain to me how you arrived at the estimate of 800 miners' inches as the amount of water which this San Diego Land and Town Company has the capacity for delivering?

384 A. I took the impounding capacity of the reservoir as given me.

Q. At six billions of gallons?

A. At seven billion gallons, I think. Wait one second and I will make sure of it. (Consults papers.) 7,240,979,905 gallons. Then I took the run-off, as observed by Mr. Savage—observed by the San Diego Land and Town Company.

Q. By the run-off you mean the water precipitated from the watershed tributary to this Sweetwater stream which is impounded by this reservoir in any one year, or a number of successive years?

A. A number of successive years. I had it from 1888–'89 to 1896–'97. I took this run-off, which represents the amount of water which actually runs off from the drainage basin after any rainfall—after you deducted plant life and evaporation, and losses by seepage and otherwise—I took into consideration the rainfall given to me from 1898 to 1897, and then in correspondence with this I took the rainfall, the average rainfall, in the drainage basin of the Sweetwater dam, also given to me by Mr. Savage, and made a comparative estimate as to the amount of rainfall necessary to give a certain amount of run-off. With that amount of rainfall—I took the statements of the rainfall for years back observed here in San Diego—and calculated from that rainfall the amount of rainfall likely to have fallen on the drainage basin of the Sweetwater, and I came to the conclusion that in seasons of dry years—not including 1898–'99—and the rainfall succeeding dry years—it is not advisable to sell more than about 800 inches or 6,400 acre feet every year from this reservoir, in order to make a continuous supply. And that was the *modus operandi* by which I came to the amount the Sweetwater could furnish.

385 Q. All that calculation could not avert the fact that there was no such amount of water caught for the irrigating season of 1898–'99? That is true, is it not?

A. That is true. But I would like to qualify this: that the dam, as far as I remember, did not give the reservoir the impounding capacity which it has now during the flood of 1896–'97 whatever it was.

Q. How much difference?

A. The dam before had only a capacity of 5,877,072,000 gallons.

Q. In round numbers, six billions?

A. Nearly so, but not quite.

Q. How do you arrive at the conclusion that under the Sweetwater system there is required one miner's inch to ever- 7 4/10 acres?

A. This I got from Mr. Boal, I think, either Mr. Boal or Mr. Savage; I rather think it was Mr. Boal told me that.

Q. Can you state how many acre feet 800 miners' inches would supply or make?

A. 800 miners' inches would give 6,400 acre feet.

Q. Can you give me the number of gallons per annum 800 miners' inches would represent?

A. Yes sir. I would explain that the acre foot to which I refer is for 200 days.

Q. (Repeated.)

A. 3,794,320,000 gallons for 365 days is the equivalent of 800 miners' inches continuous flow for the year.

Q. That would be substantially one-half the capacity of the reservoir?

A. That would be one-half the impounding capacity about of the reservoir at 365 days' continuous discharge of 800 miners' inches.

386 Q. Now in reckoning this amount of water, miners' inches, which it would be safe to deliver, you include for irrigation and domestic purposes?

A. Yes sir.

Q. All purposes?

A. All purposes.

Q. And the 800 miners' inches in this column, does that mean steady flow throughout the year?

A. That means the flow during 200 days of irrigation season; added to that must be the flow during the winter season of 165 days for domestic purposes and what small irrigation I suppose goes on here, but very little; I don't surmise that the country on the coast requires any irrigation during the winter.

Q. Then this column ought to be headed to express your full meaning: amount of water in miners' inches deliverable for 200 days each year?

A. Precisely. I also have given you the statement of the water which was to be used during the winter season in the different companies.

Q. I mean in this company.

A. Not in this statement here; but I gave it in my oral testimony in direct answer to one of Judge Works' questions.

Mr. WORKS: Yes sir—50 inches.

WITNESS: Yes sir.

Q. Does that mean 50 inches for 365 days?

A. For 165 days.

Q. Will you kindly aggregate the amount of water which this system, in your judgment, can safely undertake to deliver during each calendar year for irrigation and domestic purposes—for all purposes?

A. Well, it is 800 inches for 200 days, and 50 inches for
387 165 days. Do you want that in gallons?

Q. Yes sir. We are in the habit of considering them in that way.

A. 2,179,695,000 gallons.

Q. Now that aggregate includes the number of gallons, in your judgment, which may be delivered safely through this system each year for all purposes?

A. Yes sir.

Q. And as compared with the impounding capacity of the reservoir it is as 2,179,695,000 is to 7,240,979,905?

A. Yes sir—taking also account of the evaporation in the reservoir and the loss in the delivery of the water, each year.

Q. Where would there by any loss in the delivery?

A. Leaking faucets, and one thing and another. There is always a loss in delivery. In open systems of that magnitude the loss in delivery is about 15 to 18 per cent. In domestic systems, as this virtually is one, the loss in delivery is very likely but 3 to 5 per cent. of the water delivered.

Q. Well, if it is delivered through a meter how can there be any loss?

A. The water is lost before it gets into the meter generally. This loss is not to the consumer, but it is loss to the storage capacity.

Q. Now the number of acres irrigable by one miner's inch is put down here in your statement at 7 4/10?

A. Yes sir.

Q. By one miner's inch is meant one miner's inch for 200 days only?

A. Yes sir—12,960 gallons for 24 hours, during the irrigating season.

Q. Of 200 days?

388 A. Of 200 days.

Q. That would make how many gallons?

A. 2,592,000.

Q. And counting by acre feet, this would make just 8 acre feet?

A. A miner's inch is 8 acre feet for 200 days.

Q. It would make 8 acres?

A. Yes sir; if you irrigate at the rate of one inch to eight acres, a miner's inch gives you eight acres.

Q. And any reduction from the acre foot actually applied to the land would increase the number of acres which the miner's inch would irrigate?

A. Yes sir, if you deem that advisable. My experience in irrigation—I am sorry to say I have had some with orange trees and lemon trees—is that the older they get the more water they need. We started in on the glorious idea of one inch in ten acres; we irrigated one inch in four, and we have not enough yet.

Q. Where is that?

A. My ranch is under the Lytle Creek Water and Improvement Company's system.

Q. What soil is it?

A. Sandy loam. In Redlands they started in with the idea of one inch in seven acres. Redlands is almost identically the same ground as the foot-hills here, the same soil, and they irrigate there now with one inch in five acres and one inch in four acres; that is to say, they irrigate at that rate when they have water. This year they may not irrigate at all. It becomes apparent that when the trees are getting larger and begin to bear, in order to make a good crop of fruit you have to have a good supply of water; and

389 the failure of a great many of the orange-growers and lemon-growers can be just put down to that reason, the insufficient amount of water and insufficient cultivation.

Q. You would say then that one-third of an acre foot applied to trees from six to ten years old was entirely too little?

—. One-third of an acre foot would mean 24 acres to the inch—yes sir—most emphatically.

Q. Now supposing that a system located precisely as this San Diego Land and Town Company system is located only furnished one-third of an acre foot to the acre of irrigated land, would the service of that system be correspondingly less valuable than though it furnished a whole acre foot to the owner of the irrigated land?

A. If a system like San Diego Land and Town Company's system,

and reservoir with 800 inches average capacity or duty, would spread its water out to one inch in 24 acres, or one-third of an acre foot to the acre, it would increase its expenses very largely, and in my opinion it would be—well, strike that out—if the same system only delivers one inch to eight acres it would decrease its expenses considerably; and I don't think it would be good policy for any reservoir company to induce people to buy only one-third of an acre foot to the acre.

Q. (Repeated.)

A. If I have not answered the question I beg pardon.

Q. I don't think you understood it fully.

Q. (Read.)

A. No; I don't think so, because the consumer or the owner would pay only for what he would get.

Q. Suppose he pays upon the basis of having an acre foot and only gets one-third of an acre foot to the acre, would the service rendered by the company be correspondingly less valuable?

390 A. No doubt—on the same principle as you pay for twelve books and only get two.

Q. Now, in your judgment, is a reservoir and distributing system, located in a section of country where for two reasons in succession there is no water or substantially but little amount of water impounded, as valuable as it would be if it were located, other things being equal, where it would impound safely 800 inches of water which might be delivered each year?

A. Why, if you have——

Q. Please answer the question as pointedly as you can, and comment on it afterwards.

A. I don't understand the question quite.

Q. (Read).

A. It might be just as valuable in one place as the other, but more expensive to maintain in one place than the other, for the reason that in the place where you don't get rainfall enough to fill this reservoir every year you have to make such provisions as to store enough water from the wet years into dry years.

Q. But suppose that has not been done, would the service of that reservoir and distributing system, which furnishes only for a given year one-third of the full supply of water be only one-third as valuable as it would if it supplied the whole amount?

A. If it had not been done, or no such provisions had been made to store the water from wet seasons into dry seasons, it was a lack of foresight.

Q. I was not asking what the occasion was, but I was asking for an answer to the question as put.

A. It would not impair the value of the system in my opinion. It would simply compel the owners of the system to make such provision as is necessary to meet the conditions of the weather as

391 they have been encountered before.

Q The question was whether the service rendered by the system in such case—whether it would be only one-third the value that it would be if it supplied the whole?

A. I understood it very well; but there comes in the consideration of dry seasons which are beyond the control of man, and to make responsible the owners of the reservoir system for something beyond their control, to that I can't agree; that is to say, I can't answer your question direct—to do that unqualifiedly.

Q. Your idea is, it ought all to fall upon the consumer?

A. Oh no. But my idea is this, that in extreme drought such as we have now, it is certainly beyond the control of man, beyond the control of the consumer as well as the furnisher of the water, and that prior to the extreme seasons of drought the consumer bought or became a part owner in that reservoir. He saw the reservoir, and he could have just as well foreseen as the constructor of the reservoir what would come. It is the case universally—that we know more universally after we have learned than we knew before, and experience is the better teacher sometimes.

Q. Your theory would be that the company is entitled to six per cent upon what you estimate as the value of the reservoir, without respect to whether it furnishes water or not, is it not?

A. Oh no. If there should be enough rainfall, and the company by neglect of their own would not catch or impound that rainfall and deliver it to the consumers, I think the company would be sorely at fault.

Q. Suppose they had been furnishing 800 inches of water, as you have estimated, and suppose that for two years in succession the reservoir is idle because no water is impounded, would you
392 say that the service performed by that system is as valuable to the consumer during those two years as it was when the whole eight hundred inches could have been delivered?

A. No—during the years of drought—but with all the qualifications I made before——

Q. Do you know whether this company delivered at any time as much as 800 miners' inches of water during the irrigating season, prior to the time of the adoption of this ordinance, which was in the latter part of October 1897?

A. No, Judge, I do not.

Q. And your estimate here and all your figures are based upon the assumption that the reservoir and distributing system are capable each year of delivering those 800 miners' inches during the 200 days?

A. Plus the water for domestic use during the remaining days.

Q. But suppose as a matter of fact that there is no impounded water at all for delivery in any one season, would you still say that your estimate here is applicable?

A. Yes sir—and I beg to get permission to qualify this. As I understand, this large impounding capacity of the reservoir has not been made until after the last flood or wet season we had.

Q. You mean one billion and a quarter has been added to it since then by raising the parapet?

A. Yes sir. Now if that had been made before the flood I am satisfied there would be water in the reservoir today. And according to the rain-gauge of 40 years back—the rainfall observations, I

should say—there was not at any time a continuous drought which would not enable the reservoir to deliver about 800 inches,
393 even through the dry seasons, and I base my judgment on the rainfall for forty years back.

Q. Upon the facts you have stated the raising of this parapet has neither been used nor useful for delivering water or impounding water or providing water for the last two years?

A. It won't be useful until we get the water too to put in.

Q. Well, it has not been? has it?

A. I understand not.

Q. So in any controversy over water rates for the season of 1898–'99, and until there is impounded a supply of water, the raising of this dam would be irrelevant, would it not?

A. Is not that a question of law to decide. I am no lawyer; I know very little about law.

Q. Well, it has no relation in fact to the supply? has it?

A. No: but I have taken the facts as I found them, and based my estimate on the same.

Q. That is, if you were sitting as a board of supervisors and knew that there would be water impounded for the next irrigation season, and you were fixing rates, you would fix it as you fix it here?

A. I have never been a member of a board of supervisors; I don't know what I would do.

Q. You are testifying here as an expert. You would advise the board to fix them as you have fixed them here?

A. Somewhat similar—yes, I would.

Q. But now you would not go back for the years 1898 and 1899 and fix them the same way, would you?

A. I would try to fix the rates as——

Q. I wish you would answer my question.

A. I can't say really what I would do in going back those two years. If you make your question a little plainer I would
394 like to answer it yes or no.

Q. (Read.)—Knowing that water was not impounded during those years.

A. Judge Haines, I had particularly in my mind the last two dry seasons when I said the reservoir capacity is only 800 inches. If it hadn't been for the last two dry seasons, I think, in fact I know that the capacity and duty of the reservoir would be more than 800 inches.

Q. That is quite apparent—that it would be more than it is now at least?

A. Yes sir, a great deal.

Q. Do you consider it is a fair basis for the valuation of a reservoir system, to reject the fact that it has failed to perform its function for two seasons in succession? You have fixed the valuation here in 1897, with knowledge of the facts. Now do you consider it reasonable to reject from your valuation the fact that this water system didn't irrigate during the season of 1898–'99?

A. Of course if the reservoir system continues not to deliver water then its functions must be ceased.

Q. Its charging function ought to be modified too, ought it not?

A. Well, yes, if it does not deliver any water at all any more; I suppose nobody would pay for what they don't get.

Q. And if it delivers some, and not a full supply, the matter of rates would reasonably be modified correspondingly?

A. I can't say as to that, I think that the rate at which the payment is made per thousand gallons don't suffer at all by the non-fulfilment of the contract. It is only the amount delivered. And as the rate has nothing to do with the amount I can't see that
395 the rates should be changed. Now, for instance, instead of 800 inches suppose there are only 100 inches discharged in the year. If the 100 inches are paid at the same rate per thousand gallons per day as the 800 inches were paid for, I think that is all you can expect from the company, and all you can expect from the consumer. It is just simply paying for what you get, and not paying at all unless you do get it.

Q. And no account is to be taken of any damage or disappointment to the orchardist, who has planted his orchard and grown it upon the assumption that he would have sufficient water, and you think that you ought to lay out of consideration all lack of value of the service to him in fixing rates?

A. That I can only answer by my personal actions. I bought a ranch with one inch in ten acres. The trees began to grow and suffer. I bought it with the assurance that I had enough water; I bought more water, and still bought more water, and this year I don't get any water at all unless I hire some other water. I never thought for a moment of the non-fulfilment or the non-delivery of the water, to go into court and claim damages from the company.

Q. In other words, assuming for the sake of illustration that the consumers under this Sweetwater system acquired water rights in the system upon an agreement with the company to pay $3.50 per acre per annum, it is right they should continue to pay that, although by reason of lack of rainfall the supply fell short or ceased entirely?

A. I paid——

Q. I ask you this question: If they agree to pay that they ought to pay it, ought they?

A. In my case I do.

Q. You believe that to be right, do you?

A. I consider it the best way out of it.

396 Q. But if the company is selling water under the agreement to deliver 325,000 gallons, and you say it is entitled to raise the acre*gae* rate rather than lower it when it fails to deliver that amount——

Mr. WORKS: That is another question of law, is it not?

A. It is really hard for me to answer. I came here prepared to testify on engineering facts and features, and now you are a little hard with me, to give me law questions, which I don't know but very little about.

Q. Then you have no answer to make to the question, I take it?

A. No; I really don't think I am competent to answer.

Q. Now, in your estimate of one inch to 7 4/10 acres, or to 8 acres, you mean land actually irrigated, do you not?

A. Land actually irrigated—yes sir.

Q. And you do not consider the case of five and ten acre tracts or even larger tracts, parts of which are taken up by buildings, yards, stables, and so forth, such as are common upon agricultural ranches?

A. Judge Haines, in making out the amount necessary to irrigate a certain amount of acres ever-where we expect that there should be buildings, outhouses, &c., to go on sooner or later; but in all my figures, or in any other figures, not here alone but elsewhere, I never made any deduction for that. That has been the practice; and the small extent occupied by buildings and outhouses bears a very small proportion to the entirety it seems to me.

Q. Suppose in such a case as these Chula Vista tracts—say, there is a five-acre tract, and there is a street taken off the five acres on both sides, say it is on the corner, and there is a portion of
397 the ground occupied by the buildings and the yards and outbuildings, would you say that when the acreage rate is fixed for the whole of the nominal tract you should not take into consideration the fact that there is a portion of the ground occupied as I speak of?

A. No; because if a man gets his full amount of water he is so much better off for the balance of the tract. He gets his full amount of water, and if he has a small part of it unirrigated the balance of the tract certainly gets the benefit of it.

Q. Now your estimate of the amount chargeable for expenses and six per cent. upon the value of the system is based not only upon the valuation which you have made but also upon the estimate of expenses for operating and maintenance in 1897?

A. Yes, sir.

Q. You took your statement as to the amount of this from one of the officers of the company?

A. Yes sir; from the secretary generally.

Q. It is substantially that included in the statement laid by the company before the board of supervisors and made a part of this evidence here by stipulation, marked Land and Town Company's Exhibit No. 1, was it not? (Hands witness paper.)

A. I will see. (Examines paper, but makes no present response.)

The further hearing of testimony is continued by consent of the parties until June 16, 1899, at 9 o'clock a. m.

398 SAN DIEGO, CALIF., *June* 16, 1899—9 o'clock a. m.

A. H. KOEBIG resumes the stand.

It is hereby stipulated between the parties hereto that the statements made to Mr. Koebig by Mr. H. N. Savage, upon which Mr. Koebig's figures respecting the San Diego Land and Town Company's system contained in Exhibit J-4 were based, were based by

Mr. Savage upon the corresponding figures in Complainant's Exhibit No. 1, as brought down to a later date as shown by Complainant's Exhibit No. 3, headed: "Maintenance of Sweetwater dam, pipe-lines water-department expenses."

By Mr. HAINES:

—. What do you consider to be the irrigating season, giving the dates of commencement and ending, generally speaking?

A. It generally commences in April and ends on the first day of November. Of course there are variations either in the commencement or the ending due to the weather, late rainfalls or early rainfalls.

Q. Than an ordinance passed in the latter part of October of any year would virtually fix the rates for an irrigation season commencing next season in April? and ending in November?

A. Yes sir; it seems so to me. Of course that depends very much—I should like to qualify my statement—on the character of the ordinance. If the rates are fixed for an annual payment then I suppose it would commence on the date fixed for that year.

Q. That is, if it was an annual payment so much per acre?

A. Yes sir—that would be different—and payment so much per thousand gallons.

Q. But such an ordinance would very nearly or entirely coincide with the ending of the irrigation season?

A. The usage in all the water companies in San Bernar-
399 dino county, Orange county, and Los Angeles county is such that payments which are made by the year don't depend upon the irrigation season.

Q. That is all true. But what I am asking is this: If an ordinance is passed in the latter part of October, the date of its passage would virtually coincide with the ending of the irrigating seasons?

A. Yes sir.

Mr. WORKS: That is a perfectly evident proposition.

Q. Now in your column in Exhibit J–4: Amount of water in miners' inches, 800 in the case of the San Diego Land and Town Company—that I believe you state is 800 inches for the 200 days of the irrigating season?

A. Yes sir.

Q. And not 800 inches continuous flow for 365 days?

A. No sir.

Q. In the column headed: Number of acres to one miner's inch 7 4/10—you allow 350,000 gallons to the acre per annum, do you?

A. Whatever that amounts to. It is on the record I think; I figured it out to you.

Mr. WORKS: Yes; that was figured out:

Q. You can make that answer yes or no.

A. It is a mere matter of figuring. It would be——

Q. It is exactly 350,000 gallons, I think, when you look at it.

A. If you are sure of it, I am willing to take your word for it; I have not figured it. Do you wish me to figure it?

Q. Yes, you may do it. (Q. repeated.)

It is admitted that the number of gallons allowed to the acre, in the statement of 7 4/10 as the number of acres to one miner's
400 inch, is 350,000 gallons.

Q. Now this expression "one miner's inch" in this column headed: Number of acres to one miner's inch; means also one miner's inch continuous flow for 200 days?

A. Yes.

Q. Now in the next column: Cost per 1000 gallons,—value in 1897; does that mean 1000 gallons continuous flow during 200 days?

A. During 200 days. That means the construction cost which would be for 1000 gallons in the system.

Q. Which would yield annually year by year 1000 gallons continuous flow for 200 days?

A. Yes sir.

Q. And in the last column in this statement Exhibit J–4 Amount chargeable expense and six per cent. per 24 hours 1000 gallons; that also means during the irrigation season continuous flow for 200 days?

A. Not quite, Judge Haines; as I stated to you, all the systems have a certain amount of winter flow, and I give a certain amount of winter flow. Now then I have taken the amount of gallons discharged during the 200 days plus the amount of gallons discharged during the winter time or the 165 days; and this amount chargeable per thousand gallons for 24 hours at six per cent. ought to be applied to the water delivered as well during the 200 days as during the 165. In many instances I have known the absolute quantity which is given in the systems during the 165 days.

Q. I am not branching into other systems now.

A. In others I used my own judgment from my knowledge of the systems.

Q. Do I understand you correctly—do you mean to say
401 that this heading, this last column: Amount chargeable for expenses and six per cent. upon the valuation of the system per 24 hours 1000 gallons, includes not only the thousand-gallon flow continuous for 200 days, but also the winter flow of 50 miners' inches for 165 days?

A. Precisely; and thus I make up a charge for a thousand gallons per 24 hours independent of any length of flow, just only for the 24 hours.

Q. Well, what difference would it make whether it was 24 hours or one hour?

A. If you have one your you have to divide this charge by 24, to get the amount chargeable for one hour; if you have 240 hours you would have to multiply it by 10.

Q. You don't mean to say that this water is worth three dollars per thousand gallons, absolute measurement?

A. I meant three cents.

Q. It says three dollars, does it not, in that column?

A. No—this is three cents—three and no-hundredths cents. This column might be headed, that is, the last column, with the cent mark—both these columns. That is an oversight of mine in making out the list; I ought to have headed the last two columns "cents."

Q. Now these figures are based upon the assumption—taking the ninth line relating to the San Diego Land and Town Company—upon the assumption that 800 miners' inches are applied to 6000 acres at the rate of 7.4 acres to each inch?

A Yes sir.

Q. That is, that the whole water is employed for irrigation?

A. Yes sir.

Q. This statement then does not take into account any question of domestic rates?

402 A. No;—for this reason——

Q. I don't care for the reason. Simply I want to know the fact.

A. I would like to qualify the answer if you will permit me.

Q. Well.

A. For this reason, that the entire system is a domestic system already; it is a system under pressure, and the water used for irrigation is under the same pressure, or under such a pressure that it could be used for domestic purposes. Hence there was no difference between the two.

Q. According to that then the water used for domestic purposes—according to this chart of yours—would be paid for at the same rate as irrigation water per thousand gallons?

A. Plus the expenses incurred in delivery for domestic use.

Q. But you say the system as used for irrigation and domestic uses is all the same. How could there by any difference?

A. Very true. But as soon as you make a house connection you introduce another factor in the expense. You have——

Q. Expense to whom?

A. To the company or to the user, whoever bears the expense; I don't know.

Q. But on the face of your statement is it not true that the rate found in the last column in the case of the San Diego Land and Town Company is based on the assumption that the 800 miners' inches each year are applied to the 6000 acres of land?

A. Yes—the 800 miners' inches, and the 50 miners' inches during the 165 days.

Q. Your statement says nothing about the 50 miners' inches during 165 days?

403 A. I beg pardon. I have given in the outset of the cross-examination the list of the winter usage although it is not in the statement.

Q. I am not asking for the oral testimony. But your statement here does not show anything about the 50 miners' inches.

A. No sir; this does not show it here.

Q. Then, as I understand you, you think that this system has a capacity not only of storing but also of collecting enough water to yield 800 miners' inches continuous flow for 200 days, and 50 miners' inches additional for 165 days?

A. Yes sir.

Q. What do you make according to your system of computation the aggregate amount of revenue which should be paid, assuming that the whole land is under irrigation, in the case of the San Diego Land and Town Company, per annum?

A. I have not figured that out.

Q. You can do that readily by adding 46,170 to 17,056, according to the statement, can't you?

A. Minus 11,412——

Q. No; I am not speaking about that.

A. Well, I will sum that up for you. (Makes computation.) 63,226.

Q. Simply the sum of the figures in this line under the column six per cent. on value in 1897 and the figures in the column operating and maintenance in 1897, in the case of the San Diego Land and Town Company?

A. Yes sir.

Q. Now you make that as your estimate of the income this company should have received during the time since 1897, since the ordinance was adopted, do you, for each year?

A. Yes. This is particularly for the year 1897 on which
404 I based all my figures.

Q. You understand this is an action brought to set aside an ordinance passed by the board of supervisors in the latter part of October 1897, do you not?

A. I do.

Q. That ordinance, you understand, was operative only after it was passed?

A. Yes sir.

Q. And your figures are furnished by you as an expert at the request of the complainant in this suit?

A. Yes sir.

Q. And as evidence bearing upon the validity of the ordinance—is that right?

A. Yes sir, I suppose so.

Q. Now assuming that in the first year after the passage of the ordinance the company was only able to supply for irrigation one-third of 350,000 gallons, would your estimate apply?

A. No. If the company was only supplying one-third of the amount which is represented by 350,000 gallons, then the amount chargeable would be three times as large per thousand gallons.

Q. What do you mean by the amount chargeable?

A. The amount chargeable of the three cents.

Q. Do you mean to say the company would be then entitled to charge three times as much as if they had been able to furnish the whole?

A. Yes sir—on this theory: that the expenses, I assume, were the

same, the annual expenses; the cost of the system was the same; the product was only one-third. Now instead of having the entire amount of water to divide in that amount, we have only one-third, which would bring the charge three times as high.

405 Q. And you think it ought to be three times as high in the aggregate?

A. Yes sir, I think it ought to be; becaus- I understand, since you mention the action, that the law governing the action is this——

Q. I was not asking your opinion about the law.

A. You have asked me so often about my opinion of the law that I have been forced to give you it. But to leave that out.—If this system costs a certain amount for construction, costs a certain amount for maintenance, which amount is not changed whether I deliver 800 inches or whether I deliver only one-third of the 800 inches, the value of the one-third of the 800 inches is three times as large. With that reasoning I say the charge ought to be three times as large.

Q. Upon that reasoning, you mean to say they ought to charge just as much for delivering one-third as for delivering the whole?

A. Certainly. They have that dam there, and their pipe lines, whether they deliver one inch or 800.

Q. Assuming that in the second irrigation season after the adoption of this ordinance there was no water in the reservoir, would you say the same would hold true—that the charges to be collected by the company should be such as you have stated in your statement here?

A. Yes sir; I could not make any change on that.

Q. Your theory is that the company has a fixed investment, and is entitled to its six per cent. under the statute, whether it is able to furnish water or not?

A. With this restriction: whether it is able to furnish water or not without any neglect of its own. Of course if the company is chargeable with any neglect resulting in the failure it would be different.

406 Q. And in making this statement you assume that the company is simply furnishing water for sale, and do not take into consideration any claim that the irrigators own any interest in the system?

A. I have an idea of my own about that: that the company is just simply in the position of a carrier, a medium, between the owner of the water source and the water.

Q. That does not answer my question pointedly. (Q. read.) Let me qualify the question:—and do not take into consideration any question as to whether the irrigators own any interest in the system?

A. I do not. They simply have an interest in the water—but in the system, I don't know.

Q. That is, their interest in the water you consider to be founded upon the proposition that the water is a public use?

A. Yes sir.

Q. I believe you have stated that your estimate of the value of

the system in 1897 was based upon your estimate of what it would cost to erect the system in that year?

A. That was the foundation—yes sir.

Q. Do you know whether the lands in Sweetwater valley irrigated from this system take their water at the mains of the company or not?

A. I understand they take their water from the mains and laterals of the company. Between mains and laterals I make this distinction: the main is the large pipe which carries water to the laterals or the smaller distribution pipe lines.

Q. Do you know how many laterals there are in the Sweetwater valley?

A. I do not know.

Q. When you come to Chula Vista you understand that
407 that tract was originally piped with mains and laterals so as to reach every five-acre tract?

A. Yes sir.

Q. And that arrangement of pipes, you say, assimilates it to a city distribution for domestic uses?

A. Yes sir. In fact, if you would cut out the reservoir feature, you have entirely the same system of distribution as you have in the domestic system of Riverside.

Q. This domestic system of Riverside virtually parallels the old Riverside Company's system, does it not?

A. In a general way.

Q. That is what I mean?

A. Yes sir. You understand the old Riverside irrigation system consisted of three main canals; and they have different directions; but in a general way it is a parallel system.

Q. It was built later than the original Riverside Water Company's system?

A. Yes sir, about nine years later.

Q. I observe in your statement admitted here that you give no number of acres irrigated under the Riverside domestic system, nor the number of acres to the miner's inch. Why is that?

A. Because under the pressure system they have no regular rate of irrigation to the miner's inch: It is optional with the consumer. He buys his water by gallons under the domestic system, and not by head-runs, as he does in the water company's system. And it is impossible to get at. The usage is irregular, both for the number of acres and the water.

Q. You say it is impossible to get at the number of acres irrigated from it?

A. Well, in a short time, or without considerable examination into the books and records.

408 Q. It is really not used as an irrigation system in the proper sense, is it?

A. It is partially used as an irrigation system. They deliver water to such lands as could not be reached by the irrigation system, and in one case they deliver water under pressure to an or-

chard, in order to avoid the ditching and furrowing it across the orchard. But these are cases of not frequent occurrence.

Q. The cases of irrigation are really exceptional, are they not? under that system.

A. Yes sir. I think they were worked out only after the system was established, by necessity.

Q. It is mainly and primarily a domestic water system?

A. Precisely.

Q. The water is of a superior quality, furnished from wells?

A. It is furnished from artesian wells,—yes sir.

Q. And you give no amount chargeable per 1000 gallons per 24 hours under the Riverside domestic system. Why was that?

A. Because those charges are somewhat irregular, and I could not get a satisfactory statement in the day I spent there to get it.

Q. That virtually arises from the fact that it is not really an irrigation system,—is not that true?

A. I think the irrigation was an after-thought.

Q. Do you know how National City obtains its water from the Sweetwater dam, when there is any there?

A. Through the main pipe lines of the system, I understand.

Q. Is there one or more than one?

A. Judge Haines, I don't know.

Q. Do you know which is the more distant from the dam, National City or the land along the Sweetwater?

A. National City.

Q. And which is more distant from the dam, National
409 City or Chula Vista?

A. As far as I remember it is National City.

Q. Have you succeeded in the interval of the examination in learning whether the figures $180,000, under column of cost relating to National City, referred only to the pipe lines within the limits of National City or not?

A. I have not inquired.

It is conceded by the parties hereto that the estimate of $180,000 relates only to the pipe lines within National City.

Q. That being true, Mr. Koebig, ought there not to be added to the $180,000, as the original cost of this system attributable to National City, a proportion of the cost of the pipe lines outside, leading from the dam to it?

A. No doubt; without any doubt.

Q. And how about attributing to National City a part of the dam?

A. The same way.

Q. Have you made any estimate as to what proportion of the cost of the dam ought to be attributed to it?

A. I have not. But I think it is self-apparent that the cost of the dam attributed to National City should be in the same proportion as the water delivered to National City to the entire capacity, that is to say, to the 800 inches. And the cost of the pipe lines should

be the same for such mains through which it is necessary to conduct the water into National City.

Q. Would you say that National City should be chargeable with the proportional value of the dam and of the mains leading to it as the water it uses bears to the whole?

A. Yes. Now, is there more than one main leading to National City? I don't like to make that statement without knowing it absolutely, because in my mind there is only one main necessary
410 to do that.

Q. Mr. Boal is here. He can state to you. I will take his statement in that behalf.

Mr. JOHN E. BOAL, recalled, testifies as follows:

WITNESS: The first works put up have generally been desig*a*nted as pipe line No. 1; and there is a second main put in, designated as pipe line No. 2. These two lines are connected to National City, and water may be brought into that territory either through one or the other, or through both,

Mr. WORKS: Is one of them sufficient in capacity to supply National City?

Mr B WITNESS: Either one is sufficient to supply National City.

Mr. HAINES: Was pipe line No. 2 constructed largely because it was demanded by the lands of National City?

WITNESS: The lands of National City and other lands demanded an increased supply of water by reason of the constantly increasing use of the old pipe line, or pipe line No. 1 as it is known; and because of this pipe line No. 2 was put in

A. H. KOEBIG, resumes the stand, and testifies as follows:

By Mr. HAINES (cross-examination continued):

Q. You attribute to National City the use of one-fifth of the 800 inches of water, do you?

A. Yes sir.

Q. Upon what do you base that?

A. On the statement of Mr. Savage and Mr. Boal.

411 Q. You have no knowledge of your own in that behalf?

A. No; I have not.

Q. The statement filed by the complainant here, which I hand to you, being Exhibit No. 4, shows that for the year 1896, out of the total income or rec-ipts from the property of $29,502.16, $13,162.03 were received from National City, and $16,340.13 from outside. Do you know how it comes that if National City used only 160 miners' inches, or one-fifth of the annual supply, as you estimate it, that it thus appears to have yielded so much larger a revenue proportionately to the number of inches used than the outside territory?

A. I could not tell you.

Q. If the domestic rate per thousand gallons was 30 cents, and in National City its use is largely domestic and for kindred uses, would that tend to account for this larger proportion?

A. So it seems to me—yes sir.

Q. And it would be true generally under this system, would it not, that where the domestic use increases the return for a given amount of water would be greater than it would be for irrigation?

A. Yes sir.

Q. Returning to your statement Exhibit J–4, do you know the general quality of lands under irrigation under the San Diego Flume Company?

A. I do not.

Q. Do you know how it compares with the land about National City under irrigation under this system—under the San Diego Land and Town Company's system?

A. I never visited them; they never were pointed out to me; I have no idea.

Q. You know that they are within a distance of six or seven miles, do you not, of the lands irrigated by the San Diego

412 Land and Town Company?

A. I know they are in that vicinity.

Q. On a mesa quite similar to a good many of the mesa lands under the San Diego Land and Town Company's system?

A. I have no knowledge in particular about that.

Q. Is there not a surprising disproportion between the number of acres to the miner's inch, as you have given it here in the San Diego and Town Company and the flume company?

A. I took the statement of the flume company as it was given in the testimony. There is quite a large, and as you say, a surprising difference in the two.

Q. Do you understand that 12,000 acres are in fact irrigated from the San Diego Flume Company's system?

A. This was a matter of figuring with me. There were 800 inches given to me in the testimony as the capacity of the San Diego Flume Company's system, and 15 acres to the inch would make 12,000 acres. In my judgment I don't believe that the San Diego Flume Company has 800 inches continuous flow.

Q. You have reason to believe, have you not, that it has been short in its water supply for a number of years?

A. From the reports of the Geological Survey and the United States hydrographer I am, as much as I can be, convinced.

Q. Have you any knowledge of your own from examination of the accounts of the San Diego Land and Town Company of Kansas or of the present San Diego Land and Town Company of Maine of the items of expenditure included in this estimate reported to you of $1,026,000 as the aggregate cost of the system?

A. I have not.

Q. You simply took that upon the statement made to you by the officers of the company?

A. Yes sir.

413 Q. In the column headed six per cent. of value in 1897 I observe minus 11,412.

A. Yes sir.

Q. What is that?

A. $11,412 which were obtained in 1897 from rates from the National City system.

Q. The theory then of this statement is, that of the aggregate amount of six per cent. on estimated value plus operating and maintenance expense for 1897, what was not made up in National City ought to be made up outside? And do you make the same statement with respect to the revenue from National City of $11,412 in 1897 that you made with respect to the income of 1896, by way of accounting for its being a larger proportion of the whole revenue than the proportion of water used as you made before? Do you say that you can't account for it?

A. No, I could not, except under the hypothesis that you stated, that there was more water used for domestic purposes.

Q. I believe you stated that the water under the Riverside Water Company's system cost $11.04 per acre per annum. Am I correct?

A. I will tell you in a minute. (Consults papers.) Yes sir.

Q. What year have you reference to?

A. In the year 1897.

Q. Do you know what the amount of the indebtedness of the company was at that time? I believe I asked you something about that.

A. Yes sir—eight hundred and some odd thousand dollars; $16,000 open indebtedness. The first is the bonded indebtedness, the other is the floating indebtedness.

Q. Do you know whether the company during that year did any new work in the way of cementing ditches?

414 A. No; the cementing of the ditches of the main canal was two or three years prior to that.

Q. Had some of this indebtedness been incurred for that?

A. I think so—yes sir.

Q. There was more than twice the amount of water used to the acre than you estimate for the San Diego Land and Town Company?

A. Yes sir.

Q. In the Alessandro district I believe you stated that the cost of water was $9.55 per acre?

A. Yes sir.

Q. During the year 1897. Did the district obtain water during that year?

A. Yes sir.

Q. To what extent?

A. In 1897 it received about its full, or nearly its full, proportion, that is to say, nearly 700 inches.

Q. Do you know the bonded indebtedness of that district?

A. It was very large; I don't know the exact amount, but it strikes me it was over $400,000. But I think there was a decision of the court declaring the bonds void.

Q. That is, since that time?

A. Since that time—yes sir.

Q. Those bonds had been taken by the Bear Valley Company, or people connected therewith, had they not?

A. The Bear Valley Company took the bonds in payment of the water rates, and sold the same again to capitalists in England.

Q. Was this cost of water affected by the bonded indebtedness?

A. You must permit me to give you the statement how this cost of water was made, to show you how it was affected by the bonded indebtedness. The Bear Valley Company, or the receiver of the Bear Valley Company, stated to the Alessandro irrigation
415 district that the contract under which they were to have water, and for which they paid their bonds, was null and void. The district went into court and sought to have the bonds adjudicated as invalid. Then the receiver began to charge by the inch for 24 hours, regardless of the prior contract, and charged a figure of 36 cents per inch per day for summer water, and 10 cents per inch per day for winter water.

Q. How does this compare with the contract rates?

A. The contract rates are much lower, that is to say—do you mean the rates under the first contract with the Bear Valley Co.?

A. Yes sir.

A. The rates under the first contract with the Bear Valley were much lower. They only paid *paid* for ¼-inch continuous flow for 200 days $4.75.

Q. For an inch?

A. ¼ inch.

Q. That would be how much an acre?

A. There was one inch to four acres, so that the $4.75 charge was per acre.

Q. Was there any extra charge for water used for domestic purposes there?

A. Only during the winter, since the irrigators took their domestic water from the pipe line when they got their irrigation water.

Q. Then it was 10 cents, you say, for a thousand gallons flowing for 24 hours?

A. It was $4.75 for ¼ inch for 200 days.

Mr. WORKS: He is asking about domestic rates.

Q. Yes sir.

A. It was 10 cents per inch for 24 hours. They had no
416 domestic system whatsoever except in the town site; and the town site was shortly after the boom, many years ago, disincorporated and the houses moved away.

Q. This raise made in rates by the receiver was merely his arbitrary act, assuming that he was authorized to do so by virtue of his office?

A. Precisely. Then the matter went before the supervisors, and the supervisors fixed a rate of 16 cents per inch for 24 hours, equivalent to 1 16/100 cents per thousand gallons for 24 hours.

Q. How about domestic rates under the ordinance?

A. The winter water was to pay 8 cents per inch for 24 hours, and they were entitled to—I don't know exactly how much—I will see. (Consults paper.) They were entitled to 100 inches during that time at 8 cents.

Q. That is during the winter flow?

A. During the 165 days—yes sir.

Q. Is that ordinance still in force?

A. It is still in force, and the receiver has appealed the case to Judge Ross, which is now pending; it has been tried and argued, but no decision has been given yet.

Q. You compared the pipe of this company with the pipe of some other company, and I believe stated they were similar. What company was that?

A. It is a sheet-iron pipe. I think it was compared with the National City, the San Diego Land and Town Company's pipe.

Q. What pipe did you compare it with?

A. With the domestic system of Riverside.

Q. What did you estimate the life of that pipe at Riverside was?

A. I made a statement, not as my own estimate. My own estimate was about 15 years, and the engineer in charge in Riverside almost convinced me that it is not over 12 years.

417 Q. How long has it been in?

A. That system was built in 1893; that would be six years.

Q. I wish you would take Exhibit No. 3, of the complainant here, in evidence, and observe the general expenses for maintaining the pipe lines, which is under head "General" in the first column. As shown by the testimony of the officers of the company—it includes the work of men and teams—the material necessary for repairs, and all expenses of that kind—observe that in the years 1894 1896 and 1897 it was largely less than in the years 1889 1890 1891 1892 1893. Upon the theory of rapid depreciation, if the pipe would wear out in 15 years, how would you explain that the cost was much less in the years 1894 1896 and 1897 than at any other time?

A. There must have been some construction expenses in the years 1890 1891 and 1892.

Q. Assuming that the evidence shows that there were no construction expenses included in the years 1889 1890 1891 1892 1893, except such as were incident to replacing pipe where worn out or defective pipe which had originally been serviceable was put into repair, how would you explain it?

A. I could not explain that, because, in my judgment, it is impossible that pipe which originally had been put in in good condition, needed any repairs in one two or three years after it had been put in. My experience with pipes is that in the first few years, or the first period of the life of the pipe, deterioration does not commence so rapidly as in the latter part of the life of the pipe.

Q. Assuming that this column headed "General," to which I called your attention, covers the salaries or wages of pipe repairers, the material used in repairing pipe, cost of teams, by those

418 repairers, and the keepers of those teams, and the expenses of the dam, in maintaining a keeper, and—cleaning the reservoir, from year to year—would it indicate to you that this pipe is wearing out in any such degree that it would be worthless at the end of 15 years from the time it was laid?

A. Assuming your statement, it seems to me that the pipe has a much less life than 15 years.

Q. Much less?

A. Yes; because in the first years of the laying of the pipe there seem- to be very heavy expenses for that particular.

Q. And getting less and less later on?

A. That pipe must have been replaced then by some other pipe.

Mr. WORKS: If it all applied to pipe?

WITNESS: Yes sir; if it all applied to pipe.

Q. But upon the assumption and excluding anything but what I have stated in the assumption, is it not true that it appears that the expenses for maintaining and repairing it have been growing less rather than larger?

A. Well, if it is only in both accounts, and shows only the same ratio of repairing and maintaining all the way through——

Q. That is the assumption upon which I wish you to answer.

A. —then the pipe would get better after four or five years instead of worse—that is self-evident that it is an unnatural state of affairs.

Q. However it might be accounted for it excludes the supposition that it is deteriorating so rapidly as to be worthless at the end of 15 years?

A. Why, Judge Haines, that is directly opposite to the action of any pipe I have seen.

Q. That is, the opposite of a number of theories you have formed?

419 A. This is no theory. I base this statement on actual experiments, actual experience.

Q. Is not this actual experience upon the assumption stated?

A. Why, certainly; and I say again, I could not account for it.

Mr. HAINES: I think that closes with this witness.

By Mr. WORKS:

Q. Suppose, Mr. Koebig, that the extra cost of repairs has resulted from injury to the dam and pipes by the effect of severe storms, would that account for the extra repairs during those years?

A. Yes sir; it would.

Q. And if extra repairs were made necessary in that way, it would indicate nothing as to the life of the pipe line?

A. None whatever.

By Mr. HAINES:

Q. Do you know whether there were severe storms in 1889 1890 1891 1892 1893 in succession?

A. There was a very severe storm in 1889, about Christmas, all over California.

Q. Do you remember anything about storms in the subsequent years that I have mentioned?

A. I think we had quite severe storms in January 1891. That is only a vague remembrance though. But the storm of 1889, at Christmas or just about Christmas, is very vivid in my mind.

Q. Is that all you remember now?
A. Yes; without going into references I have.
Q. There was a severe storm in the winter of 1894–'95 was there not?
A. I rather think there was.

By Mr. WORKS:

Q. With reference to the domestic use, what is the custom
420 as to the charge made for domestic use, in comparison with the use for irrigation purposes, as to the price charged per quantity of water?
A. The charges for domestic use are much higher than those for irrigation purposes for the same quantity.
Q. How much higher usually, proportionately, per thousand gallons?
A. It commences with ten times as high, and perhaps goes in some cases as high as twenty times. That however is on the supposition that the domestic water is delivered on small lots, say from 25-foot to 100-foot lots.
Q. That is what I speak of, strictly domestic use?
A. Yes.

421 CHARLES D. LANNING, recalled, testifies:

By Mr. HAINES:

Q. To return to what you adverted to in your former testimony respecting the efforts to sell bonds executed by the San Diego Land and Town Company of Kansas, and the mortgages made by it—there were two mortgages, you say?
A. There was the original seven per cent. debenture mortgage——
Q. And what amount of bonds were issued under that?
A. $500,000 were issued and outstanding at the time of the foreclosure.
Q. And the second mortgage, how do you designate that?
A. That was called the six per cent. mortgage.
Q. And how many bonds were executed under that?
A. There were executed——
Q. I speak of execution in contradistinction to delivery.
A. There were executed and also outstanding against the company, both as collateral and bonded debt, $250,000, as I remember it.
Q. That is, a $500 bond had been sold?
A. One bond was sold and outstanding as bonded debt.
Q. And the remainder of these—how much?
A. $250,000.
Q. These $250,000—they were merely hypothecated as collateral?
A. They were outstanding against the company as collateral security for its notes.
Q. You stated that efforts had been made to sell the six per cent. bonds?
A. Yes sir.

422 Q. What was the date of this mortgage and these bonds?

A. As I remember it, that mortgage was dated March 1 1895, and due March 1 1905.

Q. What efforts were made to sell those bonds under the second mortgage?

A. Efforts were made through various banking connections of the company in New York and Boston.

Q. Commencing when?

A. Just immediately prior to the execution, that is, negotiations were attempted about that time.

Q. How long did these efforts continue.

A. They were substantially continued so long as the company was operating apart from the receivership.

Q. Until what time was that?

A. That was until September 1895. It may be that the date of the mortgage was 1894, but my recollection is that it was 1895.

Q. What amount of those bonds was attempted to be sold?

A. The whole of the amount duly executed at that time—$250,000.

Q. What prevented the effecting of the sale?

A. The general indisposition of banking-houses to sell securities upon Southern California property of this sort.

Q. Was there any effort made to sell these after the receiver was appointed and before foreclosure proceedings began?

A. An effo-t was made, but it was apparent that nothing could be sold, except a prior lien upon the property at that time; and for that reason the receiver's certificates were authorized. It was of course true that the receiver of the insolvent property could

423 hardly sell what the board of directors of the insolvent property could not sell.

Q. That is, it was not possible to find a market for them?

A. It was not possible to find a market that would have justified any such action at that time.

Q. They had been offered at 92½ cents? hadn't they?

A. To the stockholders.

Q. And the stockholders didn't buy them?

A. The stockholders did not buy them.

Q. How long was it after the receivership that foreclosure proceedings were brought?

A. The date of the beginning of the receivership was in the Massachusetts United States circuit court for the district of Massachusetts, September 4 1895, as I remember, and the confirmatory decree by the United States circuit court for the southern district of California was September 24, and the supplementary bill, or bill of that general character, by which the trustees under the mortgages became a party to the proceeding and sought foreclosure, was in the latter part of 1896.

Q. About a year later?

A. Something over a year later. It was during that time that the receiver's certificates were issued.

Q. It became necessary to issue receiver's certificates because the mortgage bonds could not be sold?

A. Because of that; and because also of the fact, as stated in my direct examination, the notes of the company were secured by bonds at the usual rate, and that floating debt, secured by bonds, having been incurred for the uses set out in my direct examination.

Q. This second mortgage was executed was it not, for the purpose of refunding the original mortgage debt and all floating indebtedness of the company?

424 A. Provision was made in the six per cent. mortgage so called for the taking up of the seven per cent. mortgage at the maturity of the latter, but that was not its direct purpose.

Q. And if that plan had succeeded, the insolvency of the company would have been averted, would it?

A. Hardly that. The insolvency of the company came at a period before that measure could have been carried out, or was intended to have been carried out; that is, taking your words, the refunding of the seven per cent. mortgage, that could not have taken place until 1900.

Q. This second mortgage was for a million of dollars?

A. It was.

Q. The company was not indebted for any such sum over and above the first-mortgage bonds, was it?

A. No.

Q. The whole indebtedness of the company when the property was sold was in the neighborhood of $900,000?

A. It was.

Q. So that if these six per cent. mortgage bonds could have been negotiated, it would have paid the debts of the company?

A. It would have paid the debts at that time. But you referred to the refunding of the seven per cent. mortgage.

Q. By refunding I mean extinguishing, if you prefer it?

A. That could not have been done until the expiration of that mortgage. There was no right——

Q. That is in 1900?

A. In 1900.

Q. What proportion of the whole indebtedness of this company did B. P. Cheney, Sr. or his estate have at the time of mortgage sale?

A. Mr. Cheney had been for some time the only resource
425 the company had for funds, and I presume you mean by that question what amount was directly held by the estate?

Q. You may give it both as absolutely held by it and that which it had become responsible for in the way of helping or assisting the company.

A. As I remember it, the estate of B. P. Cheney, the elder B. P. Cheney having deceased before the receivership, held at that time about $180,000 of the $500,000 seven per cent. debt, and I think about $120,000 to $150,000 of the floating debt of the company at that time. The precise nature of the endorsements, if any at that time were made, for the benefit of the company, or other agreements contingent and binding B. P. Cheney and his estate, I can't recollect.

Q. Is it your recollection they were any considerable amount?

A. I don't think they would have been of large amount comparatively with the amounts given as direct indebtedness.

Q. Did he in any way guarantee the loans made by the company for which the two hundred and odd thousand dollars of the six per cent. bonds had been hypothecated?

A. As I remember it there was no direct guaranty. The notes were either taken—notes to almost all the amount were either taken directly by the estate or by Mr. Cheney, or taken by or through banks or banking-houses at his solicitation.

Q. B. P. Cheney Jr. is the president of this company, the Maine corporation?

A. Yes sir.

Q. He was president of the Kansas corporation, was he not?

A. At the time of the receivership he was.

Q. And he is one of the executors of the estate of B. P. Cheney Sr., is he not?

426 A. He is.

The further taking of testimony is hereby continued, by consent of counsel, to the 29th day of June, 1899, at 9 o'clock a. m. at the office of Works & Works, San Diego, California.

427 Office of Works & Works.

SAN DIEGO, CALIFORNIA, *June* 29, 1899—9 o'clock a. m.

FRED COPELAND, being called as a witness for the defendants and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. Fred Copeland.

Q. Where do you live?

A. National City.

Q. How long have you lived there?

A. 29 years.

Q. What is your profession, if any?

A. Surveyor.

Q. What opportunity, if any, have you had to become acquainted with the property of the San Diego Land and Town Company, within the limits of the National ranch?

A. I have been deupty assessor for the last nine years.

Q. And assessed this property?

A. Assessed that property.

Q. And otherwise, in the prosecution of your business as surveyor, have you become acquainted with the lands and property of this company?

A. I have.

Q. Have you been in the service of this company?

A. I have.

Q. The former San Diego Land and Town Company?

428 A. Yes sir.

Q. In what way?

A. I was engineer for them, and worked for them a year in that capacity; and then I was up to the dam, when they were making repairs, and was inspector of the work.

Q. Have you examined the list of assets contained in the eighth annual report of the board of directors of the San Diego Land and Town Company to the stockholders, under date December 31 1894, as shown on pages 14 and 16 of such report?

A. I have.

Q. Have you made a comparison of these assets with each other in order to form a judgment of what per cent. the value of the water system bore to the total value of the whole corporate assets in June 1897?

A. You mean, taking this paper as a basis?

Q. Including this and whatever other knowledge you have?

A. I have.

Mr. HAINES: These pages 16 and 14 I will take occasion hereafter to introduce as a copy of Petitioners' Exhibit L taken in testimony before the board of supervisors in the hearing in this matter.

Mr. WORKS: You may say it is already in evidence by stipulation.

Mr. HAINES: Yes—it being already in evidence by stipulation between counsel. I shall however give a notation of each of these.

Q. In that comparison did you take any account of the completion of the construction of this pipe line No. 2 after the date of this list?

A. I did.

Q. And the subsequent planting and improvement of any of its lands by the corporation or its receiver?

429 A. Yes sir; but I didn't put a great deal of additional valuation to that.

Q. In your performance of your duty as deputy assessor did you go over the property of this company situated in the National ranch, for the purpose of ascertaining its values during those years?

A. I was perfectly familiar with all of it, had been over the whole, that is, what came under my district.

Q. That is, what came within your district as deputy assessor?

A. Yes sir.

Q. What per cent. in your judgment did the value of the water system as a whole bear to the total value of all the assets including railway, railway bonds, lands, town lots, and personal property, belonging to the Kansas corporation in June 1897?

A. About 25 per cent.

Q. What do you estimate to have been the highest population of National City at any time since the spring of 1888?

A. Why, at one time I think it was 2500 or 2600.

Q. What is that population now, about, in your estimation?

A. I don't know what it is. It would be simply guesswork. I should judge about 1200 or 1300.

Q. Have the buildings and improvements of National City kept up since 1888, or the contrary?

A. They have not. There has been 25 dwelling-houses moved away from there since then.

By Mr. WORKS—Cross-examination:

Q. You are the same Fred Copeland who testified before the board of supervisors in the investigation there?

A. Yes.

Q. Did you make your estimates of valuation and percentages on the basis of your values as you fixed them at that time?

430 A. I made——

Q. Please answer my question.

A. Yes, sir.

Q. How did you arrive at the value of the railroad?

A. I took it from the assessed valuation.

Q. And you took all of these values from the assessed valuation as you made it at that time, as testified to before the board of supervisors?

A. Yes, sir.

By Mr. HAINES:

Q. How does the percentage of values of the water system and of the whole assets, as estimated by you as assessor, compare with that of the company's itself, as shown by this list made Petitioners' Exhibit L?

Mr. WORKS: Objected to as asking the witness for a conclusion.

Mr. HAINES: I insist on an answer.

A. The assessed valuation of the land and town company's property is about $700,000.

Q. I am not asking for that. I am asking, how does the percentage compare?

A. The percentage of the water company with the other?

Q. Yes.

A. The percentage of the dam and pipe lines and all the water property, as given in their list, is about 28 per cent. of their total valuation, as they have given it in their report.

Q. And the assessed value makes what proportion between the two?

A. The assessed value is about 24 per cent.

Q. And you state now, in your judgment, that it is 25 per cent.?

A. Yes, sir.

431 H. N. SAVAGE, recalled, testifies as follows:

By Mr. WORKS—Direct examination:

Q. You were familiar with the contract that was made between the San Diego Land and Town Company and the consumers under the system for the supply of water by pumping this year, that has been read in evidence?

A. I am.

Q. What has been done by the company in furtherance of that contract?

A. (Consults paper.) The company has carried out fully, with some additions, its assumed obligation in that contract up to the present time.

Q. What has it done in the way of putting down wells, giving the number of wells and their kind; and also what has been done in the way of putting in pumping plants? Just explain fully what the company has done.

A. The first development was in the reservoir, where two gasolene-engine centrifugal-pump plants have been installed, independently, the one being about a mile and a half from the dam, and the other being a half mile further away. The upper one of these two consists of a 12-horse-power engine, a No. 5 centrifugal pump, about 500 feet of 6-inch suction pipe, with originally 2-inch drive-wells connected. These wells were replaced by wells sand-pumped with different strainers going down, well, into and in some cases entirely through a layer of bowlders, cobblestones, the present wells having a uniform depth of about 22 feet.

Q. How many of them?

A. There are 15. The lower plant consists of a 12-horse-power gasolene engine, No. 6 centrifugal pump, about 600 feet of
432 6-inch suction pipe, to which were originally connected 20 2-inch wells. These were replaced by open wells dug down to as great a depth as was reasonably possible, and the water getting down to those, additional well points were sand-pumped down to a depth varying from 17 to 2[illegible] feet. There are nine of these deep wells connected with that plant at the present time, and additional wells are being put down. A flume was laid from the upper of these two plants 10 inches square down to lower one, and there enlarged to 12 inches square and continued on down to the dam, where it discharges into the intake tower 20 feet above the lowest outlet. At the present time our men are lowering the suction main on the upper pump 8 feet. The water level varies from 15 to 13 feet below the pump, *nad* on account of the large quantity of gas in the water, the pump frequntly loses its priming, necessitating this lowering of the suction main to keep the pump operating. At the present time, and perhaps on an average since starting the plants, there has been developed about 750,000 gallons of water per day from these two combined plants. The lower one was started first, early in May, and the upper one probably was started about the last of May.

Mr. HAINES: When did you say the first one was started?

WITNESS: About the first of May. The next pumping plant in order coming down the valley is at Sunnyside. As originally projected and considered in this contract it was to consist of a power triplex-acting pump and some form of a steam-engine to drive it, and drive-wells. For this plant we have substituted a compound duplex steam pumping engine and necessary steam boiler, the plant having nearly twice the capacity of the originally projected plant.

We drove 32 three-inch wells, varying in depth from 35 to 65 feet approximately. This plant was started up the 24th of May, and has been running constantly since, with only one or two
433 shut-downs, and but for a few minutes each time.

The next plant coming down is at Linwood Grove, where we have installed a Worthington compound duplex-acting pump, with two 80-horse-power steam boilers. At the present time we have down sixty wells, that are connected up to various suction lines.

Q. Does that include those you have already given?

A. Not at all. This is independent. There are five more that are down to be connected, and we have a force driving additional wells at the present time.

Q. This now all applies to Linwood?

A. This all applies to Linwood. There are two main suction mains at the Linwood plant, one leading from the receiver south across the valley, and the other leading from the receiver west down the valley, and another one that is now temporary leading north across the valley that will be replaced with a permanent line; and the balance of these five wells, and the additional ones in that string, will be connected up to it. I think that covers in general the description of the plants.

Q. You have not given the number of wells separately that were put down at Sunnyside?

A. 32.

Q. What has been the outcome of these improvements in the way of supplying water?

A. The two plants in the reservoir have been supplying an average of about 750,000 gallons of water per 24 hours. The plant at Sunnyside is supplying a little over a million gallons, and the one at Linwood Grove we attempted to measure the day before yesterday, and with the weir box that I had the force of the water was too great to give an accurate measurement. We are probably developing about a million and a half gallons there at the present time.

434 Q. The total then would be how much?

A. About three and a quarter millions. There is in all of these wells great difficulty experienced in handling the air or gas. In the reservoir wells it is conspicuously gas. It could be seen bubbling when we were driving the first wells. At the Linwood plant we have a vacuum pump constantly in operation taking out the air of the receiver and the pump displacement would give something more than the actual quantity of water we are probably getting.

Q. What are the present indications as to the permanency of this supply during the season?

A. The upper plant at the reservoir has shown a constant decrease in elevation of water, and at the present time because of the length of suction perpendicular lift is only developing about one-half the quantity of water it did when first started. The original quantity we will probably equal as soon as the main is lowered. The permanency is somewhat questionable, but will likely decrease some-

what less rapidly than it has. The lower plant at the reservoir has shown very little decrease in the last two weeks. At Sunnyside the vacuum gauge on the receiver, that shows the amount of suction exerted by the pump to get its water supply, has shown an increase of one inch of vacuum, which corresponds to about one foot and one-tenth increased suction in approximately two weeks.

Q. What would that indicate as to the extent to which the saturated plane has been lowered?

A. It might indicate that the saturated plane had been lowered very little, and it might also indicate that the difficulty in the water getting into the wells was the controlling factor. The water plane has lowered in that valley considerably, just how much I am
435 unable to state at this time. At Linwood Grove the great number of wells and the length of the suction mains, one of them being between 700 and 800 feet, and the other one about the same, require a great vacuum for the pump to get its supply. When we first started up the vacuum gauge showed ten inches before any water was got to the pump, and with the pump running at the present time fifty to fifty-two revolutions the vacuum shows 25 inches. But in digging down yesterday we found the water plane to be five and a half feet only below the centre of the suction main. I am inclined to think, at Sunnyside, that the water plane has lowered more than it has at Linwood—that the water plane of saturation has lowered more than it has at Linwood, although the vacuum gauge does not indicate it.

Q. Has the company in contemplation any further work in the way of development in order to supply the water needed by consumers? If so, what is in contemplation at the present time.

A. In designing the Linwood Grove pumping station I made provision for a second pump in addition to the one contracted to be placed, in case the water supply showed signs of warranting the expenditure to get an increase, and the company have purchased, and are now installing, a second pump, with a nominal capacity of 800,000 gallons per 24 hours.

Q. Has the question been considered at all of putting in any wells at a gre-ter depth?

A. The directors yesterday approved my suggestion that one or more deep wells be driven immediately at Linwood Grove, to provide against the possible contingency of exhausting the water in the wells already driven. And that work will be started at once.

Q. To what depth is it expected those wells will be driven?

A. To at least 200 feet, if necessary, and to be in diameter 10 inches, or as near that as we are able to get casing.

Q. What has been the effect so far, Mr. Savage, upon the
436 trees of the consumers with the supply of this additional quantity of water by pumping? Have they been kept in fairly good condition up to the present time, the trees and the fruit?

A. I think the trees and the fruit may be said to be in fairly good condition throughout the ranch where they have received their *pro rata* of this pumped water. There are some orchards that, for

reasons of care, or cultivation, or of elevation above the reach of the system at the present time, of course show bad condition; but those orchards that are well cared for, that have received their *pro rata* of this pumped water, I think are in quite good condition, and also the fruit. I know the company's orchards are producing a large quantity of fruit, and there is a large showing of fruit on them.

Q. What is true of the trees of other consumers?

A. The conditions are identical.

Q. Has the company and have you reasonable expectation that the company will be able, by the exertions it has made and expects to make, to continue through the season a sufficient supply to keep the trees in reasonably good condition?

A. The indications at the present time and developments of water have exceeded my expectations in each case. And the permanency of the supply is a matter that no one can determine with any degree of accuracy. The company have signified, and the directors have approved, some recommendations I have made to them for installing even additional plants to those now installed and projected, in case of any decrease in water supply at any of the present existing plants; and we thoroughly expect to be able to carry the orchards through in fairly good shape.

Q. Will you state what has been the expense to the company of these additional improvements and developments, and what you estimate will — the additional expense that has not yet been incurred or rather paid for, if any—what is yet unpaid for what
437 has already been done?

A. It is impossible at the present time to give the cost of these plants that are installed because of the yet not paid charges; but up to May 31 there had been expended and paid a total of $17,923.52, and there are vouchers approved in my office at the present time that have not been turned over to the treasurer for bills to the amount of about $1,000. In addition to this will be a number of considerable bills for pipe, driving wells, June pay-rolls for labor in installing the plants, and the purchase price of this new plant just obtained. There will also be the added cost of these various wells, which it is impossible to determine with any degree of accuracy, as we are putting them down constantly, and expect to put them down as the conditions demand throughout the irrigation season.

Q. Do you think of anything else?

A. I think that gives the information regarding the expenditures in a general way.

By Mr. HAINES—Cross-examination:

Q. What do you estimate as the daily delivery now possible or competent to be made by the system in the aggregate of gallons?

A. Between three and four million gallons. Without accurate measurements it is impossible to give accurate results. We have apportioned 500 gallons per day per acre to each acre of the four

thousand acres approximately now under irrigation under the system, and that is being substantially delivered and measured.

Q. And like Oliver Twist they are calling for "more"?

A. Yes sir. And we are making what we think some pretty heroic attempts to get that more.

Q. And this embraces the domestic supply also, does it, or
438 is that over and above the 500?

A. The domestic supply would be in addition to what is shown by the two million gallons for 24 hours for irrigation measured delivery. There is also to be accounted for the general leaks of the system, which since the starting of these pumps has been unusually great. And the domestic also includes the sprinkling and irrigation of the various town lots in National City.

Mr. WORKS: The domestic supply, I suppose, includes National City also.

WITNESS: The domestic supply includes National City as well as all other sections of country commanded by the pipe lines of the company.

Q. So that for the aggregate delivery under the whole system within and without National City, you say between three and four million gallons per day?

A. Yes sir.

Q. This is all under the contract introduced in evidence—these improvements?

A. Yes sir.

Q. Did you get the amount of delinquent rentals at the end of December 1897?

A. No. But I will. It is $3,464.03.

Q. Did I understand you to say that two million gallons each 24 hours is the amount now furnished for irrigation?

A. Yes sir; that is approximately the amount.

Q. When did irrigation begin, that is, when was the company able to apportion water for irrigation during the present season?

A. I don't remember the date, that that portion in the reservoir was first made available.

Q. That was ten thousand gallons per acre?

439 A. It was—yes.

Q. And when was the pumped water available for irrigation?

A. The 10,000-gallon apportionment was probably distributed in April or early in May. And the Sunnyside pumping plant was put into operation May 24th. There was water available at that time, both from it and the reservoir plants. And the Linwood pumping plant was put into operation about June 14.

Q. When was the 500-gallon-per-acre apportionment made to begin?

A. I don't remember the exact date. There was a smaller apportionment prorated per day from the pumping plants, and then that was increased to 900 gallons per day per acre until all the water in the reservoir was exhausted, and then the five hundred gallons

per acre per day apportionment has been prorated since, the last being in effect probably about two weeks.

Q. No controversy has arisen between the consumers on the one hand and the company on the other from this contract for this pumped-water supply?

A. I don't understand there has and I do understand it has been unusually unanimous.

By Mr. WORKS:

Q. Have any of the eastern directors of the company been here of late looking into the question of these additional improvements in water development?

A. There are three of them who are here now and have been for the past two weeks.

Q. I wish you would state, if you know, what their disposition is with reference to pushing these improvements in such a way as to supply the needed water for consumers?

A. They have shown an unusual desire to do anything
440 reasonable or properly possible by the expenditure of additional sums, and have approved the expenditure of a large amount of money for sinking wells in contemplation of contingencies to arise during the balance of the season, and also have authorized, if necessary, the installing of one or more pumping plants in addition to what have already been put in.

By Mr. HAINES:

—. The company has irrigated its own lands under cultivation from the pumped water supply?

A. It has, sir.

Q. And when the flood waters furnish water in the reservoir in sufficient amount, the operation of this pumping plant will be superseded, will it not?

A. It will—yes sir.

Q. And those installed in the reservoir site will have to be taken up?

A. They will. It is probable however that except in years when the reservoir is nearly full a portion of this pumping plant will be operated to force water to the higher orchards throughout the system.

Q. What proportion of these higher orchards does the company own?

A. Probably about one-half, probably a little less. I would like to correct that estimate. It is from one-half to one-third, and probably less.

Mr. WORKS: You speak now of the lands owned by the company on the higher lands?

WITNESS: Yes sir, now being irrigated.

Q. What proportion of the sum of $3,464.03, shown by the books of the company as being water rentals due and unpaid December 31 1897 was collectable?

441 A. Probably three-fourths of it was collected within thirty days, and a total of four-fifths of it was collected within sixty days.

Q. And the remainder?
A. Probably has never been collected.

S. A. DALE, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. S. A. Dale.
Q. Where do you live?
A. Chula Vista.
Q. How long have you lived there?
A. Five years.
Q. Do you own a tract of land under irrigation from the company's system?
A. Ten acres.
Q. Have you been acquainted with the quality of the domestic water supply of the San Diego Land and Town Company since the passage of this ordinance in October 1897?
A. Yes sir; I ought to be familiar with it ever since I gave been on the tract.
Q. Will you state such facts as are within your knowledge hearing upon the quality of this domestic water supply, as furnished from the reservoir of the company since the passage of that ordinance?
A. Well, I would say for the past two years it has been gradually growing worse. From, say, two years past it has been—vile
442 is the word that seems to cover it more than anything else, in quality—totally unfit for domestic use. And for the last part of last year it has been totally unfit to be allowed inside of a house, any dwelling-house.

By Mr. WORKS—Cross-examination:

Q. This condition of the water developed — suppose when the water became low in the reservoir, did it not, Mr. Dale?
A. Well, I don't know at what gauge the water was at the time that it was noticed, but going back for the past two years it has been, as I regard it, totally unfit for domestic purposes.
Q. During those years the water has been low in the reservoir as compared with other years, has it not?
A. Yes sir; it was low as compared with the two years previous.
Q. Well, the last two years have been both what we call dry years, haven't they? Do you know anything about what the depth of the water was in the reservoir at the time you commenced to notice this extremely bad condition of the water?
A. I could not say positively, but at a good guess somewhere about fifty feet, I guess.
Q. What is the depth when the reservoir is full?
A. I think 70, but I am not positive.
Q. Are you right sure about the depth?
A. No; I am not. I have said right along that I thought that was it.

Q. What has been the condition of the water in that respect since the pumping commenced?

A. Well, there was—today the water is the best I have seen in a long while; but since the pumping commenced we have had periods of very poor water, and periods of very good; I think however it is because they have mixed the two waters, mixed the old water
443 with the new; and I think they pumped into the reservoir and let it out again, and what filth and dirt is in the reservoir contaminates the good pumped water.

Q. You think the pumped water is good water?

A. The pumped water is good for domestic purposes if not contaminated with the other, but it has been contaminated so fearfully on some days I have had to shut the water off from my premises to keep it from getting into the house.

Q. Mr. Dale, you are a practical horticulturist?

A. Only a novice at it.

Q. How long have you been at it?

A. Five years.

Q. That has been your business during those five years?

A. Practically—yes.

Q. What number of boxes of lemons may be reasonably expected from a full-grown tree?

A. I never saw a full-grown tree.

Q. What aged trees would you be able to speak from?

A. From my own orchard, five years old.

Q. What would be the average output in boxes per tree for trees of that age?

A. Mine last year averaged me probably half a box—I guess more than that—three quarters of a box to a box to the tree; this year they will average a box and a half to the tree.

Q. Last year was not an average year, was it?

A. Well, I think it was; I think my orchard was a little above the average.

Q. The amount of lemons will increase from this on up to what age of the tree?

A. I can only answer by hearsay; I don't know from my own knowledge.

Q. What is your information on the subject?

444 A. I have information that it will average probably fifteen boxes to the tree when the tree is ten or twelve years old. I have had estimates a great deal higher, and estimates lower.

Q. I want to get a fair average. Do you think fifteen boxes would be a fair average?

A. For a well taken care of tree I should think it would.

Q. What are lemons selling for this year?

A. I have heard prices all the way from one cent a pound to three.

Q. Just at this moment what is the price?

A. I don't know.

Q. It is in the neighborhood of three cents a pound, is it not?

A. I presume it is.

Q. And for a good part of the season the lemons have been selling for two and a half, have they not?

A. I have only heard of one or two sales at that.

Q. Have you sold any yourself?

A. I have not.

Q. You don't — then from actual knowledge?

A. I do not.

By Mr. HAINES:

Q. Your orchard is on soil above the average of quality and excellence, is it not?

A. I think it is.

Q. You have been able to give it the best of care?

A. I have; and I have spent a great deal of money on fertilizer.

Q. That soil requires heavy fertilization when trees begin to bear, does it not?

A. I thought so; that is the reason I put it on.

445 Q. I mean the soil in Chula Vista.

A. Yes sir.

Q. Have you been able to form an estimate of the expense of creating an orchard after the land is paid for, from the beginning until the trees are five years old, per acre?

A. Well, I can form a pretty good guess in my own case.

Q. You spent only what was reasonably necessary, did you?

A. In my judgment I did; I didn't fool anything away that I know of.

Q. What do you state to be the expense of bringing an orchard to five years old, excluding the cost of land and water rights?

A. I will give you a pretty close figure on that. Mine has cost between three and four thousand dollars I think.

Q. For ten acres?

A. For ten acres, from the time I set it out to the present time.

Q. What would be the expense per acre?

A. Three or four hundred dollars an acre; I don't think it would be under four. It would be more if I figured in my own time as worth anything, but I have taken no account of that whatever.

Q. Then, in addition, would be the expense of the land and any water rights, if water rights were purchased?

A. That is exclusive of the first cost of the land. It includes no interest on capital invested, or anything of that kind, but just actual money spent.

By Mr. WORKS:

Q. How many pounds of lemons are there to the box, about?

A. In a field box there are from forty-five to fifty; in a packed box about seventy. We are in the habit of speaking of boxes as field boxes.

446 Q. When you speak of the price of lemons do you speak of the price of them as in the field boxes?

A. Yes sir, as a rule that is the case.

Q. In your statement as to the cost of your ranch you included the cost of the water?
A. Certainly.

447 GEORGE DASCHBACH, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. George Daschbach.
Q. Where do you live?
A. Chula Vista.
Q. How long have you lived there?
A. Nearly four years.
Q. Have you a place there irrigated from this company's system?
A. I have.
Q. Are you acquainted, and have you been acquainted with the quality of the domestic water supplied from the company's reservoir since the enactment of this ordinance in October 1897?
A. What ordinance do you mean?
Q. The ordinance passed by the board of supervisors fixing rates.
A. Yes sir; I have been acquainted with it.
Q. State such facts as are within your knowledge, bearing on the quality of the water supplied.
A. I have considered it so unfit for use that I have been carrying my water since then from various places—Otay—I have carried until they got a small pump in the Sweetwater valley, and then I carried it from there in barrels for my domestic use.
Q. Do you keep paying your domestic water rate to the company?
A. I do—yes sir.

448 By Mr. WORKS—Cross-examination:

Q. When did you first notice that condition of the water?
A. Well, when it commenced to get low in the dam.

A. C. CROCKETT, being called as a witness for the defendants, and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?
A. A. C. Crockett.
Q. Where do you live?
A. Chula Vista.
Q. How long have you lived there?
A. I have lived there seven years.
Q. Are you the owner of land under the irrigation system of the San Diego Land and Town Company?
A. I am.
Q. You pay domestic rates and acreage rates also?
A. Yes sir.

Q. Have you been acquainted with the quality of the domestic supply of this land and town company as furnished from the reservoirs since October 1897?

A. I have.

Q. Will you state such facts as are within your knowledge bearing upon its quality?

A. It has been unfit for domestic use for two years, for about that time—so much so that I have bought my domestic water elsewhere.

Q. Do you know whether people have been building cisterns for their house use?

449 A. They have—yes sir.

Q. You yourself have knowledge of that?

A. I put in six, I built six during last January and February—during last winter.

Q. You are a bricklayer by trade, are you?

A. I have been—yes sir.

Q. You keep paying your domestic rates, do you, to the company?

A. I do.

By Mr. WORKS—Cross-examination:

Q. That condition of water resulted when the water became low in the dam, I suppose?

A. I think so.

By Mr. HAINES:

Q. And it was low when this ordinance was passed, was it not, in October 1897?

A. That is my understanding of it.

The further hearing of testimony is continued, by consent of counsel, until 2 o'clock p. m. of this day.

TWO O'CLOCK P. M.

It is stipulated by the parties hereto that the copies of the following exhibits referred to in the evidence taken before the board of supervisors in the matter of fixing water rates of the San Diego Land and Town Company of Maine may be substituted and placed in evidence herein, in connection with the transcript of such evidence taken before the board of supervisors, to wit:

1. Protestants' Exhibit B, referred to in said transcript at page 179.

450 2. Peti-oner- and Protestants' Exhibit C, referred to in said transcript at pp. 179-'80.

3. Petitioner- and Protestants' Exhibit D, referred to in said transcript at p. 180.

4. Protestants' Exhibit D, referred to in said transcript at p. 404, which reads as follows:

"Property of San Diego Land and Town Company, who are also owners of Chula Vista,

Five thousand acres, subdivided in five-acre tracts, to be sold only to those who will improve the same at once; improvements to consist of a house to cost not less than $2,000. Entire tract covered with water mains, filled with pure mountain water from the Sweetwater reservoir, (capacity 6,000,000,000 gallons.) National City and Otay railway in operation through centre of property with frequent trains to San Diego and National City. More than fifty modern houses completed and twenty-five more under contract to be completed within six months.

Low prices for the first few who locate; 20,000 acres irrigated fruit and farm lands

immediately adjacent to San Diego and National City. Abundance of water in pipes at $3.50 per acre per year. Choice locations in Sweetwater valley at $250.00 per acre, less a rebate of *$50,000* per acre for each acre planted to citrus trees and maintained for one year.

For information, terms and prices, inquire of—

WM. G. DICKINSON,

General Manager San Diego Land & Town Co., National City, Cal."

451 5. Petitioners' Exhibit L, referred to in said transcript at pages 387 388 389.

6. Petitioners' Exhibit X, referred to in said transcript at page 354.

Mr. HAINES: The defendants offer and read in evidence, from the decree in case No. 671 U. S. circuit court 9th circuit southern district of California, in cause: San Diego Land and Town Company of Maine substituted as complainant in place of Charles D. Lanning, receiver of the San Diego Land and Town Company, complainant, against H. C. Osborne and others, defendants, the operative portion of such decree, in words and figures following, to wit:

"It is further considered and decreed by the court that the defendants herein other than those defendants as to whom this suit has been dismissed, as aforesaid, be and they are hereby perpetually enjoined from prosecuting in the State courts, or elsewhere, separate actions against the complainant, San Diego Land and Town Company of Maine, to prevent said complainant from collecting or enforcing the collection of the rate of $7.00 per acre per annum for the irrigation of the lands of said defendants and each of them, fixed and established by the San Diego Land and Town Company and by Charles D. Lanning, receiver, as in said bill set forth, until the fixing and establishing of such rates by the board of supervisors of the county of San Diego, State of California, or the re-establishment thereof in accordance with law.

It is further considered and decreed by the court that the said San Diego Land and Town Company and Charles D. Lanning, re-

ceiver, had the right to increase the amount of the water rentals of said company for water furnished to the lands of said defend-
452 ants from $3.50 per acre per annum to the sum of $7.00 per acre per annum for such irrigation, and that the said defendants be and they are, and each of them, is, hereby required to pay to the complainant said rate of $7.00 per acre per annum for water furnished their lands, as set forth in the bill of complaint herein from and after the first day of January, 1896, until the fixing and establishing of such rates by the board of supervisors of San Diego county, California, or the re-establishment thereof in accordanee with law, as a condition upon which water shall be furnished them by the complainant, and that upon failure of said defendants or any of them to pay said rates, the complainant, San Diego Land and Town Company of Maine, be and it is hereby authorized to shut off the supply of water to such or any of said defendants who shall fail for five days to make such payment,—provided that the furnishing of water to the defendants for other purposes be not thereby interfered with.

Entered the — day of——.

It is stipulated by the parties hereto that the defendants named in said cause No. 671 comprise all the consumers outside of National City under said water system.

453 HENRY GULICK, JR., being called as a witness for the defendants and being duly sworn by the special examiner, now testifies as follows:

By Mr. HAINES—Direct examination:

Q. What is your name?

A. Henry Gulick Jr.

Q. Where do you live?

A. I am living at Riverside now.

Q. Where were you living in the year 1897, and in the early part of 1898?

A. Chula Vista, San Diego county.

Q. When did you remove from there?

A. I think it was the 2d day of last January.

Q. Are you interested in any land in Riverside that is irrigated?

A. Yes sir.

Q. Under what system is it irrigated?

A. The Gage irrigation system.

Q. In 1897 did you own property under the San Diego Land and Town Company's system?

A. Yes sir.

Q. How much?

A. Twenty acres.

Q. Irrigated from that system?

A. Yes sir.

Q. Will you describe in a general way the construction of the Gage system?

A. The water is developed in the Victoria tract east of San Ber-

nardino, and consists of flowing artesian wells, and flows from
454 those wells into an open ditch or flume, which is cemented the entire distance to Riverside; and from that it flows to the separate lands or tracts of land, in ten-acre pieces, in pipes.

Q. What sort of pipes?

A. They are, I believe, all 10-inch steel pipes, the same as are used, I believe, by the company here and most every place else.

Q. By the San Diego Land and Town Company, you mean?

A. Yes.

Q. Do I understand you to say that the lands under that system are laid out in—what sort of blocks?

A. 40-acre blocks.

Q. And how frequent are the pipes leading from the ditch?

A. At every street.

Q. That is, at the distance of a quarter of a mile from each other?

A. Yes sir—a quarter of a mile from each other.

Q. The ditch is brought down at a grade, and lies at the upper or higher end of the whole tract irrigated?

A. Yes sir. It is set at a grade of two foot to the mile from the wells, which was done, of course, to take in as much land as possible, in order that the end of the line would be as high as possible.

Q. How many acres lie under this ditch, approximately?

A. Approximately, I presume, eight thousand acres, seven to eight thousand.

Q. Are these pipes so laid that they reach each ten acres of land?

A. Yes sir—well, to be perfectly plain, a pipe is let in from the main pipe to the highest part of the ten acres; it might be
455 right to the edge, and it might be fifty feet, or it might be a little more.

Q. That is, there is a lateral from the main in the street to the highest point of ground?

A. Yes sir.

Q. In each ten acres?

A. In each ten acres.

Q. Where do people under the Gage system get their domestic water supply?

A. From the same source, in other words, from the ditch.

Q. And what is the situation of the lands under that ditch, that are supplied from these pipes, with respect to pressure?

A. Well, as the ground slopes away from the canal at a good grade within ten acres of the ditch there is pressure sufficient to reach to the most of the houses, in fact all of the houses, on these lower tracts.

Q. Reach how high?

A. I can only state as to our own house, which is ten acres from the ditch, and we have water in the first floor; I don't know whether it would rise to the second or not.

Q. But as you go down, the land slopes away from the ditch, does it, the whole tract of land?

A. Yes sir.

Q. How is the pressure further on down from the ditch?

A. I would state, approximately that there would be about from 80 to 100 feet fall at the lower end.

Q. That pressure is given to the water in the pipes?

A. Yes.

Q. Were you acquainted with the quality of the domestic water under the Sweetwater system in 1897, and until you left in 1898?

A. Yes, sir.

456 Q. How does the quality of the Gage System water compare with what that of the Sweetwater system was, within your knowledge, and how did it compare at that time?

A. I think our water up there is very much purer; it is artesian water.

Q. What can you say about the condition of this water after this ordinance was enacted, in October 1897, under the Sweetwater system?

A. My remembrance is that it was very bad.

Q. Is it possible for the water under the Gage system to reach *and* such condition as this Sweetwater water was in?

A. Oh no; it is moving water all the time.

Q. And what is the Sweetwater water when the reservoir has a supply? Is it stagnant water?

A. Yes sir—stagnant water.

Q. How is that Gage Company organized? What interest have the consumers in the system, if any?

A. Well, I would presume it was on the mutual plan. When we buy land we buy so many shares of water stock with each acre.

Q. And you pay for your water stock so that you own the land and water as one property?

A. As one property—yes sir.

Q. What have been the rates for water supply under the Gage system, to the consumers, the annual rates?

A. They have ranged from $1.80 to $2.20, I think, an acre per year.

Q. Does that include or exclude the domestic supply.

A. There is no charge for domestic supply.

Q. What position does the company take with regard to domestic supply with its consumers under that system?

A. The only thing I know in regard to that is a question I asked Mr. Irving, who is the general manager——

Mr. WORKS: We object to the conversation which took
457 place with Mr. Irving: it would not be competent evidence.

Q. It was in course of your dealing for land?

A. Yes sir.

Mr. HAINES: I think that would be competent.

Q. You may state.

A. Simply the fact that he stated to us that they had never reached the point, and never could see why they should make a separate charge for domestic water.

Q. So that these rates you speak of per acre per annum include also the domestic uses of water on the land?

A. They do—yes sir.

Q. What amount of water does that system furnish to the acre of land at those rates?

A. A perpetual flow of one-fifth of an inch to each acre.

Q. By perpetual, do you mean perpetual throughout the year, or only through the irrigation season?

A. Perpetual—it is presumed to be perpetual.

Q. Are you acquainted with the Riverside Domestic Company's system to any extent?

A. Not very much, except that it is very near us. We do not use it of course.

Q. Do you know what sort of a system that is?

A. It is the artesian water that is developed at their wells ve-y near the Gage System source, brought down in pipes to Riverside instead of a ditch.

Q. Do you know what that water is devoted to?

A. Purely domestic use.

Q. Do you know from what source the lands which are traversed by the pipes of this domestic water company receive their water for irrigation?

A. It is the same source as the domestic supply—the arte-
458 sian wells.

Q. What company supplies water for irrigating lands in Riverside?

A. The Riverside Water Company.

Q. Is that a different water company from the domestic water company?

A. I believe not—the same company.

Q. The same company has two different systems, as you understand it?

A. Two different systems—yes sir.

Q. Which was the first put into operation?

A. The irrigation system.

Q. Now do you know from what sources it gets its water? That is the old Riverside irrigation system, is it?

A. Yes sir.

Q. It is now known as the Riverside Water Company?

A. Yes.

Q. Do you know from what source it gets its water?

A. From artesian wells east of San Bernardino.

Q. Do you know whether it gets any from the Santa Ana river?

A. They have a certain portion, which is only and can only be used a portion of the year.

Q. And that water company conducts its water, how?—the irrigation water?

A. In an open cemented ditch.

Q. Then it has one supply for irrigation, and the other for domestic use?

A. Yes sir.

459 JOHN E. BOAL, recalled, testifies as follows:

By Mr. HAINES—(Cross-examination continued:)

Q. What amount of income for domestic rates was realized from the company's property, outside of National City, during the year 1897?

A. About $242.

Q. What number of acres was the company irrigating outside of National City?

A. About 1353 acres.

Q. And of others how much?

A. About 2,020 acres.

By Mr. WORKS:

Q. The lands of the company that are being irrigated are supplied with water in precisely the same way, and under the same terms, as water is being supplied to other consumers?

A. Yes sir.

In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY OF MAINE, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

I hereby certify that the evidence in this cause was all taken down by myself, that the foregoing transcript of the same was correctly transcribed, and contains a full, true, and correct statement of the testimony and proceedings on the hearing thereof.

FREDERICK MEAKIN, *Reporter.*

San Diego, California, July 13, 1899.

460 In the Circuit Court of the United States, Ninth Circuit, Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY OF MAINE, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

I hereby certify that the foregoing depositions were taken pursuant to the agreement and consent of the solicitors for the respective parties, at the time and place stated in the caption of the depositions, in my presence, and in the presence of the solicitors for the respective parties to the cause in said caption entitled, and under my direction; and that previous to the giving of his testimony each witness was by me first duly sworn to tell the truth, the whole truth, and nothing but the truth in said cause. Said depositions were, by stipulation of the parties, and under my direction, taken down in short-

hand by Frederick Meakin, the stenographer appointed by me and approved by both parties, and afterwards put into typewriting pursuant to said stipulation, the signing by the witnesses of their respective depositions and the taking of the oath by said stenographer having been by said stipulation waived. Said stipulation herein referred to is embodied in the foregoing transcript.

The foregoing is a correct transcript of the testimony taken and the proceedings before me as special examiner as above set out. Accompanying said depositions are the several exhibits introduced by the respective parties referred to and specified herein

All of which is respectfully submitted this 17th day of July 1899.

GEORGE J. LEOVY,
Special Examiner in Chancery.

461 (Endorsed:) Filed Jul- 17 1899 Wm. M. Van Dyke clerk

462 BOARD OF SUPERVISORS,

San Diego Co., Calif.

Received and filed this 29 day of Oct. 1897.

CHAS. H. HOLCOMB,
Clerk of the Board of Supervisors, San Diego County,
By J. M. DODGE, *Deputy.*

463 *Index.*

J. D. Schuyler (read)	37		
J. D. Schuyler	80	Cross 81	
John E. Boal	113	Cross 127	Rec. 341, 387, 483, 490, 495, 503
H. N. Savage	273	Cross 284	Rec. 498, 505
Francis S. Earle	377	Cross 380	
Ira Howe	388		
C. L. Josselyn	391	Cross 393	
N. H. Downs	400		
John M. Ballou	402	Cross 404	
C. H. Rippey	405	Cross 411	
Fred Copeland	413	Cross 420	
C. S. Alverson (read)	425		
John E. Clouse	470		
Henry Gulick	473	Cross 479	
C. H. Stuart	480		
Payne Brown	507		

464 Before the Board of Supervisors of the County of San Diego, State of California.

In the Matter of Fixing Water Rates of the San Diego Land & Town Co. of Maine by the Board of Supervisors of the County of San Diego, State of California.

SAN DIEGO, CALIFORNIA, THURSDAY, *October 7th*, 1897.

Counsel appearing: For petitioner, V. E. Shaw, Esq., and Oscar A. Trippet, Esq. For water-consumers, (claimants and protestants herein), Messrs. Haines & Ward and C. H. Rippey, Esq. For S. D. L. & T. Co., Messrs. Works, Works & Ingle.

Mr. SHAW: Before the clerk reads the petition, I suggest that the board order the proceedings taken down by a shorthand reporter; it is likely that the matter will come before the court.

Mr. WORKS: I want to say, Mr. Chairman, that we join in that request. We think the proceedings had better be taken down.

Mr. SHAW: They probably will be valuable to the board in coming to a conclusion in this matter.

It is moved by a member of the board, and seconded, that Mr. W. W. Whitson be employed to make a shorthand report of the proceedings.

The CHAIRMAN: It is moved and duly seconded that Mr. Whitson be requested to take down the proceedings. (Carried.)

Mr. SHAW: Mr. Chairman, I think it well to first call the attention of the board to the act under which this petition is presented; that is the act approved March 12th, 1885.

(Reads act approved March 12th, 1885, Statutes 1885, page
465 95 *et seq.*)

That is the law under which this board is called upon to act in this matter, and section 4, which I desire to read again is as follows:

SEC. 4. At the hearing of said petition the board of supervisors shall estimate, as near as may be, the value of the canals, ditches, flumes, water chutes, and all other property actually used and useful to the appropriation and furnishing of such water, belonging to and possessed by each person, association, company, or corporation, whose franchise shall be so regulated and controlled; and shall, in like manner estimate as to each of such persons, companies, associations, and corporations, their annual reasonable expenses, including the cost of repairs, management, and operating such works; and, for the purpose of such ascertainment may require the attendance of persons to give evidence and the production of papers, books, and accounts, and may compel the attendance of such persons and the production of papers, books, and accounts, by attachments, if within their respective counties.

The petition which is signed by more than twenty-five inhabitants, is as follows:

To the honorable board of supervisors of San Diego county, State of California:

We, the undersigned, each of whom is an inhabitant, and each of whom is a tax-payer of said county of San Diego, State of California, hereby petition your honorable board in writing to regulate and control the rate and compensation to be collected within the said county of San Diego (outside of any city or town therein) by the San Diego Land and Town Company, a corporation organized under the laws of the State of Maine, for the sale, rental or distribution to any inhabitant of said county (outside of any city or town therein) of the water of the Sweetwater river, in said county, by said corporation appropriated for irrigation, rental or distribution.

466 And your petitioners will ever pray.

Signed M. T. Hall and others.

I suppose you will admit, Judge Works, that the signers of this petition are tax-payers of this county?

Mr. WORKS: I really do not know anything about it, Mr. Shaw.

Mr. SHAW: Of course, if you desire to save time——

Mr. WORKS: I do not want to admit that now, because I do not know.

I want to say to the board that I have just learned that Mr. Boal has been suddenly called away, that the wife of Mr. Savage the engineer of the company, is dangerously ill, and I am afraid is dying, and of course I cannot go on with these proceedings in the absence of Mr. Boal and Mr. Savage—in fact without both of them here; they are the only persons who know anything about the books of the company or its operations, or anything of the kind. Mr. Boal was here, and I supposed we could go on. He told me as we came down that Mr. Savage had been summoned to the sanitarium where his wife is, and where she has been ill, and that he was afraid she was worse, but I did not want to delay the proceedings if we could go on with it, but he came to me after the case was called and said that they had just telephoned him to come up there immediately, and that he was afraid from the tone of the telephone message that she might be dying, and of course I cannot go on without those gentlemen here. I would not be able to furnish what this board will undoubtedly require from us, some statement of the operating expenses and the value of the plant, either in the form of a tabulation, or if counsel desire it, the books themselves. The information I suppose would have to come largely from us, and without those gentlemen here I am utterly helpless to do anything. It is one of those unforeseen difficulties.

Mr. SHAW: Of course we will furnish all the information in our possession, but as Judge Works suggests, it is nearly all if
467 not all in the possession of the water company, and this board in obtaining information which will enable them to fix these rates will have to obtain that information largely if not altogether from the land and town company.

Mr. WORKS: It may be that Mrs. Savage's condition is not as serious as I am afraid it is. It might be that with a little delay they might be here, but I know Mr. Boal felt when he went away that it was a very serious matter.

Mr. SHAW: We might take a recess until two o'clock.

Mr. WORKS: Of course I have no disposition to delay the matter, I am prepared to take it up, but you can see the position in which I am placed.

Mr. HAINES: We want to make a statement before we adjourn. We are dependent upon the same sources of information. The board can very well know that the consumers under this system nor the inhabitants and tax-payers of the county who are petitioners, or who are not consumers, know nothing about the company except as they learn it from the company. The information is entirely, I suppose, at the disposal of the company, but in a preliminary way I want to say to the board that as I understand it these petitioners are inhabitants and tax-payers of the county and therefore compe-

tent petitioners, but none of them are at present or have been consumers of water under the company's system. They confer jurisdiction upon the board to act, and some of them doubtless want to avail themselves of the water of this company, but they are not actual consumers of water. During the day Colonel Rippey and I propose in behalf of such consumers, to file before your board a protest and a claim, the nature of which I will indicate.

Section 552 of the Civil Code provides:

Whenever any corporation, organized under the laws of this State, furnishes water to irrigate lands which said corporation has sold, the right to the flow and use of said water is and shall
468 remain a perpetual easement to the land so sold, at such rates and terms as may be established by said corporation in pursuance of law. And whenever any person who is cultivating land on the line and within the flow of any ditch owned by such corporation, has been furnished water by it with which to irrigate his land, such person shall be entitled to the continued use of said water, upon the same terms as those who have purchased their land of the corporation.

It will be observed that this section applies only to those to whom the company has voluntarily begun to furnish water. To this class all water-consumers under the system belong. You will have observed that the statute of 1885, which Mr. Shaw read, speaks of two purposes for which rates are to be fixed; one of them is virtually for maintenance, operation and repair; the other great object of fixing rates is to furnish a net revenue to the company upon the value of the system, as it may be estimated. Thus, the purposes for which rates are collected are subdivided into these two great divisions, one to maintain, operate and keep in repair and pay for the management of the water system, the other to furnish a net revenue. Now the substance of the protest and claim which the present consumers will file before your board, and upon which they will insist throughout, is that all the people now using water under this system are the owners of what this statute designates as being the right to the flow and use of this water as a perpetual easement, and that they own it in freehold—that is they are absolute owners of it, and have paid the company or otherwise satisfied it for the whole of such right to the use and flow of this water, and that being the case under the statute as it now stands—Mr. Shaw did not read quite all of that statute, there is an amendment in 1897 of which we will have to take account, which virtually is a guarantee to all these people who have acquired these rights to the flow and use of this water, that their contract right shall be protected and recognized everywhere,
469 and the substance of this claim and protest will be that while this board has jurisdiction to fix rates to meet the expenses of maintaining and managing and operating the system and repairing the system, that it has no jurisdiction as to these people to go beyond that and allow any net revenue at all. We will put that in writing so it will be clearly before the board, some time during the day.

Mr. WORKS: Mr. Chairman, you will no doubt see at the outset

that the company occupies a very peculiar situation with reference to the fixing of these rates, and so will this board, if this protest is to be allowed, and people outside who are really not consumers under this system and under the rates that have been established by the company, are allowed to appear before the board and compel it to fix rates, while the actual consumers are insisting that the board of supervisors has no jurisdiction to fix the rates. That protest against the jurisdiction of the board to fix the rates as now presented is in a qualified form, but the question as to whether the company has any right to change its rates, or whether the board of supervisors has any right to fix rates for the company, is a matter that is now in course of adjudication in the courts. I understand the position of the protesting consumers here to be in the first place that the company has already fixed its rates, and that it has no power to change those rates at any time, and secondly, that as the company has fixed its own rate which must prevail for all time, the board of supervisors have no right to change those rates or to fix other rates. Now we are met with these two contentions. Here are some outside parties, some of them I think—I do not think all are, but I think some of them are really consumers under the system, but in this way, they are from the Otay section, and water is delivered to that section in bulk by the land and town company for so much a thousand gallons, and that water delivered in bulk is distributed by the people themselves, and they make their own
470 rates. I may not state it exactly as it is, but that is my recollection, that they occupy—some of them at least—that position towards the company.

Now our contention in reference to the power and jurisdiction of the board under this petition is that the whole matter of fixing these rates is open for this board to determine. The law provides upon what basis the board shall fix the rates, and the amount those rates shall return to the company. It is simply a matter of ascertaining the operating expenses of the company, the deterioration as we shall claim of the property by reason of its use for the benefit of the consumer, the value of the property or its cost—and there will be a contention between us as to whether the present value shall be taken or the actual cost to the company—the amount of water that the company is able to furnish to its consumers, assuming that its whole supply is furnished, and the balance is a mere matter of mathematical calculation.

Our understanding of the law is that you must first ascertain what the operating expenses are; that includes of course the repairs that are necessary to be made upon the plant year by year, then you must ascertain as we think what the value of the plant is. We maintain that that value is governed by what it has cost the company. The other side will contend that you must take the present value, if you can arrive at that value, at the present time, but whatever basis you take, the law provides that the board shall fix such rates as will furnish to the company not less than six per cent. net upon the value of its property.

Now the claim is made that because some of these consumers have

purchased their land directly from the company, and because other of the consumers have purchased water rights, that they are not bound to pay anything in the way of revenue to the company; that by buying the land from the company and by buying the water
471 right, they are entitled for all time to receive their water for nothing, that the company can only be remunerated for the actual expense it incurs in furnishing the water. That proposition of course we deny. Our understanding of the rights of a party who purchases a water right or who purchases land from the company with the accompanying water right is that the consumer thereby obtains a preferred right to the water, but that he takes it subject to the payment of the annual rates, whatever those rates may be, and that those rates must be so fixed as to return the company the compensation that is provided by the statute. And I think this section to which Mr. Haines has referred shows that to be so. "Whenever any corporation, organized under the laws of this State, furnishes water to irrigate lands which said corporation has sold, the right to the flow and use of said water is and shall remain a perpetual easement to the lands so sold." Now there is no controversy between us on that proposition. We concede that whenever these consumers have acquired the right to use the water, whether they bought it as a water right—very few of them have done that—or whether the company has voluntarily furnished them the water for nothing—whether it sold them the land or whether it didn't—whenever the water is attached to their land, they acquire a water right under this section. They are always entitled to the water from that time on, and the company is bound to furnish the water to them. There will be no controversy between us on that score, but the statute further provides "at such rates and terms as may be established by said corporation in pursuance of law." As the statute then stood, of course the rate could be fixed by the company itself. Under the statute of 1885 under which this petition is filed, the board of supervisors may fix those rates.

We expect to present to the board anything that may be demanded of us in the way of information with reference to the cost of the plant or operating expenses or any other matter that the board may deem to be of importance in arriving at a just
472 solution of this question as between the parties, and I regret very much that the general manager and engineer of the company are not able to be here so that we may go on and have the matter closed up. We are as anxious to have the matter disposed of as counsel on the other side. But nearly all of us I think will be helpless to get at the exact facts with reference to it without the presence of those gentlemen.

Mr. SHAW: Judge Works, I understand you to say that you will contend that the value of the plant is the cost to the company of the plant?

Mr. WORKS: That will be one of our contentions.

Mr. SHAW: Perhaps we can agree upon that right here. It is a well-known fact that the plant and all the property of the land and town company was sold a few days ago for something less than

$900,000, I think, or in that neighborhood, so that the cost of this property, of all the property, including the railroads, the lands, orchards, and everything of the kind, to the company, is something less or in the neighborhood of $900,000, and if we can agree upon that I think it would only take a short time to separate the cost of the water plant and distributing system from the railroad and land and other property which is not connected with the water plant, the water plant probably being one-third or not exceeding one-half at any rate of the value or cost of the entire plant.

Mr. WORKS: No, counsel cannot have that stipulation in reference to it, because that is not the cost of the plant. What we mean by the cost of the plant is the cost of its construction and putting in. The present company when it bought the property bought it simply as a matter of paying its own debts; in other words the original San Diego Land and Town Company had become indebted, and they undertook by a reorganization, to assess their own stockholders and pay off those debts. About three-fourths probably of the
473 stockholders of the company, went down in their own pockets and put up the money necessary to pay off the bonded indebtedness of the company. Some of the other stockholders of the company refused to pay their assessment. They either had to proceed against those delinquent stockholders and attempt to collect their assessments in that way, or they were compelled to sell the property out in order to pay off the indebtedness, which was done. That course was taken, and the property was simply sold for an amount sufficient to pay all of those debts. It is no criterion whatever as to the value of the property.

Mr. SHAW: It was all sold though at public auction to the highest bidder, after due advertisement?

Mr. WORKS: Yes, it was all sold. The decree under which it was sold provided that it should be sold for a sufficient amount to pay these debts, and the debts are set out, the items are set out in the decree itself, and they in that way paid not the value of the plant, but paid off their own debts, so of course we would not concede that that was any criterion as to the value of the property. What we understand to be the law with reference to it is that the amount of money invested in the plant for the benefit of the public—and of course it is invested for the benefit of the public because it is a public use and they are entitled to the water—that the company should have a return upon its investment. That is a question about which there is a disagreement. Judge Ross has held in one case that the present value of the plant is to be taken, and the matter is now before the supreme court of this State involving that very question as to what is to taken as a basis. I am very sorry that that case could not be decided before this case is taken up because whether favorable to them or to us it would have settled one of the disputed questions about which we will have to contend in fixing the rates.

Mr. TRIPPET: If the board of supervisors please, I hope there will be no misunderstanding about what may be termed the so-
474 called reorganization that has been mentioned, by the board of supervisors. The corporation that is now before this board

of supervisors is the San Diego Land and Town Company of Maine; the corporation that built this water plant and formerly owned this water plant was the San Diego Land and Town Company of Kansas. They are as different as night and day. They are as different as any two individuals in this house; they have no more relation to each other than the counsel on the two sides of this case; they are wholly independent and different.

This term reorganization has been applied to that proceeding by which a large number of small stockholders were cheated out of their property, if the contention is made here that that property did not sell for its value. If it sold for its value, which has been contended by the present company—by the officers of the present company—that they paid all it was worth, then the old company stepped out and the new company stepped in. The investments made by the stockholders of the former company have nothing to do with the investments made by the new company. They are corporations organized in different States and are different individuals. This corporation of Maine came in here and bought this property and paid less than a million of dollars for this water plant, for a railroad running into Mexico, with terminals in the city of San Diego, National City and other places, and a large amount of lemon groves, and a great deal of real estate, and if this present company and the present stockholders and its officers claim in this proceeding that they did not pay the full value of that property then they come here and prove beyond doubt that they have cheated the former stockholders out of their property. And it will be shown to this board of supervisors, if that is contended by the present company, that its own officers have asserted and now assert that they paid all the property was worth. I make this statement to the board of supervisors simply
475 in hopes that you may not get your minds tending in the wrong direction. The value of a piece of property is what it sells for; it is fixed in the market. This property was advertised for sale under foreclosure and was sold to the highest bidder, and the highest bidder was persons who were representing this present corporation and owning it, and transferred it to the present corporation without any consideration except the repayment of the debt, that they made at the time of the sale. And we shall contend that that sale fixed the value of this property at less than a million dollars—not simply the water plant, but fixed the value of all their property, and all the supervisors will have to do in order to determine the value of this water plant is to determine the value of those ranches and the railroad—matters which can easily be determined by the testimony of plenty of people in the city and county—and deduct it from the purchase price, and you have the value of this water plant.

Mr. WORKS: We seem to have a sort of three-cornered or four-cornered fight here. I should like to have it understood in the beginning who the gentlemen represent. Mr. Shaw we know represents the petitioners; Mr. Haines I believe says he represents the actual consumers. Mr. Trippet, whom do you represent?

Mr. SHAW: Mr. Trippet is associated with me, and I would ask that an order be made to that effect.

Mr. WORKS: We would ask then that the order be made.

The CHAIRMAN: The order will be made. I understood that Judge Works.

Mr. WORKS: I did not know that.

Mr. HAINES: You have not heard anything more from Mr. Boal, Judge Works?

Mr. WORKS: No I have not. Perhaps we had better let it go over until two o'clock, and I will try and find out by that time. We should like to see that protest—will you place it on file?

Mr. HAINES: Yes, I will place it on file. I will file it at
476 two o'clock.

The CHAIRMAN: Do I understand that you now want this matter to go over until two o'clock?

Mr. WORKS: Yes sir.

Mr. SHAW: The matter so far as we are concerned can be adjourned until two o'clock.

The CHAIRMAN: If there are no objections, the matter will be continued until two o'clock. It is so ordered.

Afternoon session.

Mr. HAINES: Mr. Chairman, I have now prepared in formal shape this claim that we make before the board—and protest. That there may be no misunderstanding by your members, I want to read it and explain our position under it.

To the honorable board of supervisors of the county of San Diego:

The present consumers of water for irrigation from the system of the San Diego Land and Town Company, who live outside of the city of National City, hereby allege and claim that each of them respectively has by purchase or otherwise become the owner of a right to the flow and use of so much of the water appropriated by said company for sale, rental and distribution as is necessary to irrigate his or her respective tract of land under said company's system; that to each of said tracts of land the said company or its predecessor in title did, by its consent and voluntary act annex the easement of the right to the flow and use of water from said system for irrigation of such tract in freehold; that each such consumer has fully paid or otherwise satisfied said company and its predecessor for the full price and value of such water right; and
477 that none of such consumers, nor any of the lands of such consumers are liable to pay to said company any water rate other than their due proportion of the annual reasonable expenses of such company to cover the cost of repairs, management and operation of the works used and useful to the appropriation and furnishing of such water to such land.

And each and all said consumers protest against the fixing of any rates as to them to provide or create net annual receipts and profits upon the value of said company's water system so used and useful

for the appropriation and furnishing of such water to their respective lands.

Signed by Haines & Ward and C. H. Rippey, attorneys for the consumers.

Now the position these consumers take in the outset is, that the board ought to as to them find out what ought to be the annual expenses, the rate to raise the annual expenses, for repairs, management and operation, and as to them, ought not to go into or fix a rate to also yield net annual revenue. The distinction, as I said this morning, is made in the statute between this class of expenses, repairs, management and operation, and the other class, of rentals, for net annual receipt. Now this matter is filed at this time in order that these consumers may be in position to protect their rights. The litigation that is now going on is virtually over this question—it is one of the main features of it at least—of whether people can own as they would own a piece of land, this right in the company's system to the flow and use of the water. These people claim that they own that and have paid for it just as they would have paid for a piece of land bought of the company, and they admit that your board has jurisdiction to go on and investigate what it costs to maintain and operate the system, and that every one of them is liable to pay his or her proper proportion of these maintenance expenses. This position is one which your board will consider
478 when you come to reach*ing* a final conclusion upon the whole matter. It is a position upon which we would like to introduce out evidence when the time comes, and be heard upon it, and submit it to you for your disposition, when you come to reach your final conclusion. We do not want to argue any questions at law at this time, we simply submit it for your consideration in the case as it proceeds, and to be determined when you finally get ready to reach a conclusion. I offer for filing, this claim.

Upon motion duly seconded the document just read is received and filed.

Mr. WORKS: Mr. Chairman, if you will allow me I would like to know, and I think I am entitled to know whose these gentlemen represent. They simply say "the consumers;" there are a great many consumers down there, and it may be that Col. Rippey and Mr. Haines are simply representing themselves—they are consumers. I apprehend they are representing or claim to represent all the consumers, at least who are engaged in the present litigation.

Mr. HAINES: Yes sir that is right.

Mr. WORKS: I would like to have an understanding of it Mr. Haines.

Mr. HAINES: Yes sir that is right. The company as Judge Works will bear me witness, has made or attempted to make all the consumers under this system parties in the case in the United States court, and it is those consumers in the whole body that we seek to represent.

Mr. WORKS: I want a distinct understanding as to that, because as I understand the present situation, and I think it is important

for the board to know in investigating this matter, these petitioners are not, properly speaking, consumers under the system at all. All the consumers are here in court asking that these rates be fixed upon the basis of simply returning to us the operating expenses. I think that is a matter which must be determined in the be-
479 ginning, because if the board concludes that that is the proper basis for fixing the rates, our work will be very short; the board will have to determine only what our expenses are and what rates will be necessary to raise those expenses. On the other hand, if the board should find that we are entitled, as the statutes provide, to our operating expenses and a net return of six per cent., then an entirely different investigation will have to take place. Then there is another question that arises, that is raised by counsel for the petitioners, which it seems to me ought to be settled in advance, and that is that the present value of the property is to be taken as a basis for fixing the rate, and that present value is fixed by the amount that this company bought the property for. Now it seems to me that those are preliminaries that we should settle right in the beginning so that we may know what to work to, and if counsel have anything to say in support of the respective positions they take, it seems to me they ought to say it now. The objections are such that we cannot very well enter upon the taking of the testimony.

What I was afraid would happen this morning did happen—Mr. Savage's wife died soon after the announcement was made here this morning, and I cannot go on without having Mr. Savage here. He has done most of the figuring in reference to this matter. I am perfectly willing to do anything I can do in order to get the matter along, but of course those are things that we cannot control.

Mr. SHAW: Mr. Chairman, I think Judge Works is in error in saying that I raised the question this morning as to whether or not it was the cost of this plant to the present company that should govern, or the cost of construction. The remarks which I made were brought out by Judge Works stating that they would claim that the cost of the plant was the value of the plant, and I stated that if that was his position I would be willing to stipulate with him that that was the value of the plant.

480 Mr. WORKS: State your position with reference to it. Do you make any such claim as that?

Mr. SHAW: I cannot tell yet—I am not prepared to state. With reference to the other question that Judge Works raises concerning Mr. Haines' clients, I desire to say that my clients are the ones who have initiated this proceeding and we do not want to be horned out of this thing at all. We want these rates fixed. This company is selling water not alone to Mr. Haines' clients, there are other people there at Otay and other places buying water, and they want to know what they have to pay for this water. It seems to me, although it may take considerable time, that there is no other recourse but to go into the whole question and do just what the statute provides that you shall do, take into consideration all the evidence, make a thorough investigation, and then fix the rates.

Mr. WORKS: I think gentlemen, that those gentlemen should settle this matter among themselves as to the basis upon which they want these rates fixed. We are here simply to represent the interests of the company. The attorney for a large body of these consumers says they must be fixed upon a certain basis; the few petitioners who are in here claim they must be fixed upon another basis. We want to know what we are to work to as we go along, in putting in our proof, and I think counsel should be called upon to submit fairly that question to the board, so it can be determined. If the board should determine a certain basis upon which they fix these rates, then we will be prepared to make our proof upon that basis, whatever it may be—because that would be binding upon us and there is no use of our staying here two or three weeks and offering testimony upon all branches of this case, when the board may determine right in the beginning of it that four-fifths of what we want to offer would not be competent evidence. It seems to me that in justice to all concerned, these preliminary matters ought to be determined in the beginning.

481 Mr. SHAW: It is a three cornered fight and I do not see how any agreement can be made. Mr. Haines insists upon a certain position, my clients are not really opposed to that, nor are we interested in it that I see one way or the other. That is a matter between the water company and Mr. Rippey and Mr. Haines and their clients, but immaterial to the public at large, which is represented really by these petitioners.

The CHAIRMAN: Has anybody anything further to say upon the question?

A MEMBER: We are ready for the question.

The CHAIRMAN: The vote is upon the proposition to receive and file the protest. (Carried.) Mr. Boal was up here since we adjourned and he requested me to give them until tomorrow at two o'clock. If there is anything further that you wish to take up now, the board will be glad to go ahead with it. Under the circumstances, if you wish him as a witness, if you wish to introduce evidence, the board of course would wait.

Mr. WORKS: We would have to have Mr. Boal here, except as to these preliminary matters, of course as to those we can get along probably until tomorrow afternoon without Mr. Savage. I would not expect him to remain away from his wife's grave to be here to testify.

The CHAIRMAN: The board is at your service.

Mr. HAINES: I think there is nothing for the board to do except to go on with the evidence.

Mr. WORKS: What is to be done with your protest then? Here is a protest to the jurisdiction of the board.

Mr. HAINES: My suggestion was to leave that matter to be determined at the close of the evidence. We do not want to cut off any of your testimony, we are willing that you should put all in that you want to.

Mr. WORKS: I am not offering testimony in the beginning the

petitioners must offer their testimony first, but this is a pro-
482 test against the board fixing the rates on a certain basis. We think that ought to be settled, as I said.

Mr. JUSTICE: The question is then as to whether the board will grant the protest, or go on with the testimony?

Mr. WORKS: Yes sir, if the board grants the protest it is a very short matter to determine.

Mr. SHAW: I do not see how it would shorten it in the least, Judge, if the board grants the protest, or takes the view that they should do what Mr. Haines claims they should do they would then necessarily have to fix—because Judge Works admits their right to fix—the operating expenses, and that would involve all this question, that is everything in reference to the operation of the plant, and the petitioners insist upon fixing the rates for operation as well as the net revenue provided in the statute, so even if the protest were granted, or denied, I do not see how it would make any difference. If it is denied we have to go into all of it, and if it is granted and you admit that the position taken by Mr. Haines is right, you have then to go into the question of operating and management and maintenance and repairs, for his client. For my client you have got to go into that same subject, plus the net-revenue question, so it necessitates going into the whole question whichever view you take.

Mr. WORKS: I think the board will readily see that counsel is mistaken in that view. If Mr. Haines is right in his position there will be no necessity for the board taking up time in trying to ascertain the value of this plant for the reason that we then would not be entitled to any interest upon the value of the plant. If you have to ascertain not only the operating expenses but the net revenue to which we are entitled, necessarily you have first got to find what the operating expenses are. That I assume you would have to do even under Mr. Haines' view of it, but you would not have to ascer-
tain the value of the plant and determine what would return
483 us the six per cent. at least to which we are entitled. That would be entirely eliminated from the controversy.

Mr. SHAW: The public Judge, are interested in that.

Mr. WORKS: No, the public are not interested.

Mr. SHAW: The petitioners are, and we come here and ask that these rates be fixed. If we take that view, will you make that rate apply to all?

Mr. WORKS: We would have to undoubtedly, we cannot have one rate for one man and another for another.

Mr. SHAW: That is just the position Judge Haines takes, as I understand it.

Mr. WORKS: Judge Haines is exactly right in that proposition, whatever rates this board fixes must be a uniform rate for all parties, there is no question upon that subject.

Mr. SHAW: There are different classes.

Mr. WORKS: Oh yes, that is right.

Mr. SHAW: If that class that did not buy water with their land—they would have to take it from year to year, and the supervisors would have to fix a rate upon that.

Mr. WORKS: That is not Mr. Haines' proposition at all.

Mr. SHAW: Mr. Haines and I agree upon very few propositions.

Mr. WORKS: I think we ought to have some sort of plan, to know what we are offering evidence for.

Mr. JUSTICE: It would seem to me Mr. Chairman that it would be necessary to determine both the value of the plant and the cost of it, and at the same time the operating expenses, because here are two classes, one demanding the amount of operating expenses and the other the value of the plant, so you can see at a glance that take whichever horn of the dilemma we please we will be obliged to go through the same process—that is the way it seems to me.

The CHAIRMAN: Judge Works, do I understand that you desire the board to decide whether they are going to grant that protest?

Mr. WORKS: No, no, the protest is on file.

484 Mr. JUSTICE: As to whether we will go on with the hearing of the testimony or not.

Mr. WORKS: The question is whether under that protest you will confine the proof to what will be necessary to establish to fix the operating expenses, and the revenue to return those—that I think the protest calls for.

A MEMBER: Wouldn't we have to do both, Judge, if we heard the plea of the petitioners and then also of the protestants, because those protesting would be willing for us to fix a rate for the operating expenses and repairs, and the petitioners ask for——

Mr. SHAW: They admit that they should pay a net revenue——

The SUPERVISOR: Yes, sir.

Mr. SHAW: Yes, sir; the petitioners and those for whom they act. Judge Haines comes in here practically as an intervenor, and claims that he has rights in the matter, and that the same rules could not be applied to him and his clients as are applied to the petitioners and the public at large.

Mr. WORKS: Well my view about it is that if Mr. Haines' views are sustained, that the rates must be uniform as to all parties and if the board should determine that we are only entitled, as against Mr. Haines' clients, to such an amount as would pay the operating expenses, that applies to all the consumers; you cannot fix different rates for different people except as Mr. Shaw suggests, you may fix different rates for different classes of consumers, for instance for irrigators and for domestic use, and for matters of that kind, necessarily you would have to fix different rates for those purposes.

Mr. SHAW: With due deference to the views of Judge Works I desire to say at this time that the views of any lawyer are worth very little in view of the various decisions of the Federal court and the State courts on this water question. The board of supervisors have to go into the whole question, and act upon their own

485 views—and they are just as likely to be right as any lawyer.

Mr. HAINES: I would be sorry if at the conclusion of the matter the supervisors would hold the views suggested by Judge Works, that those people who never got any water by the consent of the company stand upon precisely the same footing as those who have

bought and paid for water rights, or otherwise acquired them by consent of the company. I do not know what position the company is going to take before this board, except as Judge Works now states it. I understand him now to state that he is going to take the position before the board that if those who own water rights now are entitled to *to* have the water for the maintaining, operating and repairing and managing expenses, that that must be the rate as to these new people who want water. I am advised that there are some petitioners who are just waiting to get rates fixed so that they may come in to take water for the first time. Now if the board should do that sort of thing we would be liable to fall into an error which would result in setting aside the ordinance. The company has not taken that position before, I can say that much, because I have here their rule which they adopted in this respect, which is now supposed to be in force, if any of their rules are—as much as any of them are—and that rule makes just this distinction precisely. It is the tenth rule, and says: "For the purpose of fixing rates for irrigating acre property the lands of that character are classified as follows. (See classification.) All lands to which the easement and flow of water for irrigation has been or shall be annexed by the consent or voluntary act of this company shall constitute the first class; all lands to which the easement and flow of water for irrigation purposes has not been or shall not be annexed by consent or voluntary act of this company, shall constitute the second class." So you see they have classified these lands in their own rule. What distinction do
486 they make in reference to rates? It is this: For irrigating acre property of the first class the rate is hereby fixed at $7.00—that is what they claim, a $7.00 rate—then, for irrigating acre property of the second class the rate is hereby fixed at $7.00 per acre per annum, and in addition to said annual rate for water used upon lands of such second class there shall be paid upon lands of such class an annual charge equal to six per centum of the value of the right of such easement and flow of water * * * which said value is to be taken at $100 per acre.

Now you observe gentlemen that the company in its rule makes the very distinction which the Judge is repudiating now, and I would be afraid of the result, because I do not think a man has a right to compel the water company to commence furnishing him water on the same basis, and not pay anything for the water right, and have the water on the same basis as those who have bought and paid for it, or to whom the company has voluntarily given it as a gift if you please. It seems to me that the only safe way is to hear this petition, what is proper to be heard under the petition, because that is the foundation of your jurisdiction, and that covers the whole question, net annual receipts, as well as this maintenance business, and then we are as Mr. Shaw suggests, a sort of tail end to the thing—we come in to protect our rights under this action, but the board must go on under the petition and hear the whole business, and then we propose to be heard as to our rights and when we have heard all sides, the whole matter, and the board has it all before it, it can act. I do not want to stand here and say that the

board shall commit error in the first instance, by refusing to go into the whole question.

Mr. SHAW: I think it is proper for the board to take into consideration any evidence that the land and town company desires to offer. If they want to offer testimony with reference to the original cost of this plant, I do not think I shall enter any objection
487 to it. I may argue at the close of the case that it should not be considered, but we cannot even tell about that really until all the testimony is in. I appear here representing the second class, whom the company are now endeavoring to tax $13 an acre, as shown by that rule for water.

The CHAIRMAN: Gentlemen, I do not know what we are going to do in the matter, we have here a petition, I suppose it is a legal petition or it would not have been protested against at this time. It has been advertised, and the time set to proceed with this case, and that we shall determine these values. I do not know of any way to determine them without evidence. If there is any other way I would like to get at it. Judge Works says he cannot produce any evidence this afternoon. We are willing to give him plenty of time, but I do not see any way that the board can prevent going into this matter.

Mr. SHAW: I think if either side claims any evidence is pertinent it is the duty of the board to listen to it and consider it. I suppose in the absence of Mr. Boal it would be impossible to go on this afternoon, and we might as well adjourn.

A SUPERVISOR: In order to expedite matters, I make a motion that the board go on with the investigation and hear the testimony in the case. (Seconded.)

The CHAIRMAN: You have heard the motion, duly seconded. Any remarks? If not, those in favor say aye. (Carried.)

A SUPERVISOR: Mr. Chairman, in the absence of Mr. Boal and Mr. Savage, I move that we adjourn until tomorrow afternoon at two o'clock. (Seconded.)

Mr. WORKS: If the gentlemen on the other side, or the board, desire any particular information to come from us, I should be glad if they will let us know, and we will prepare it, so as not to be delayed. Of course I realise that most of the information will have to come from us, and we will be glad to furnish anything that they want.

488 The CHAIRMAN: I suppose Judge that they will have to get at the expense of maintaining that system, and they will also have to get at the value of it. I suppose you will have something to say on that yourself when the time comes, but as I understood it this morning that we should proceed first to ascertain the cost of maintaining that system—I believe that was the statement you made this morning?

Mr. WORKS: That is one thing that would have to be determined, yes sir.

The CHAIRMAN: I suppose that is the first thing that would have to be considered. I suppose you are prepared to furnish that?

Mr. WORKS: We can furnish that in different ways, from the books, and we have a duplicate statement made of the cost of main-

tenance for each year since the company commenced business, and the different items composing it we claim to be proper operating expenses; some of them no doubt will be protested by counsel on the other side. They may require of us the production of the books; if they do we would like to know that, or if they will be content to take the duplicate statements from the books, we have those statements made up. The books are open to the inspection of the counsel, or the board, if it should be deemed necessary.

Mr. HAINES: Mr. Boal was kind enough to furnish me with a partial copy. If you have a complete copy you might leave it and we would notify you of what we wanted.

Mr. WORKS: Mr. Boal said you asked him for one paper, and I understood him that he gave it to you.

Mr. HAINES: He gave me a copy, but there were some figures subject to revision in it.

Mr. WORKS: He had a tabulated statement made up showing the operating expenses, the general expenses, interest, and various other things, taxes and so on. We will undertake to furnish this
489 tabulated statement showing all operating expenses for each year, and showing the total. This will be open of course for investigation as to such matters as the board cares to inquire into. It seems to me that it would be a great undertaking to bring in all our books, and while we are not averse to bringing them in if necessary, it would take a great deal of time.

Mr. SHAW: The petitioners will not require it, if Mr. Boal will be able to give us the items making up these various totals, that is the total of general expenses, and legal expenses.

Mr. WORKS: We can give you that in a general way. They have run through all the years. For instance, construction, if you wanted to investigate the claims, you would have to follow it out each month and each day, but those vouchers can be furnished if it is necessary to be done, but as I say if you are going into all of those items it will be an immense job.

Mr. HAINES: If Mr. Boal can give such explanation as he has at hand, I think we can get along pretty rapidly.

Mr. WORKS: We took the evidence in the National City case——

Mr. SHAW: Have you or has the company a transcript of that evidence?

Mr. WORKS: Yes, and that perhaps will contain much of the evidence you will want here.

Mr. HAINES: It would appear to me that probably that, and such oral testimony as Mr. Boal and Mr. Savage can give on the items would be sufficient. As far as I am now advised it is not necessary to go back so many years.

Mr. WORKS: We want to furnish you the data clear back, and if you desire you can go into it—just as you like. Our disposition is to get along just as rapidly as we can, but at the same time to furnish everything that is required of us to furnish, that is all.

Mr. HAINES: I think we will be able to shorten this up considerably.

Upon motion the board adjourns until tomorrow afternoon at two o'clock.

490 FRIDAY, *October 8th*, 1897.

The CHAIRMAN: Gentlemen, the board is ready to proceed whenever you get ready.

Mr. WORKS: Our side is ready, I believe.

Mr. HAINES: We understood Judge Works to say that they would furnish us with a copy—which I suppose is partially correct—of a tabulated statement of what they claim their books will show, bearing upon all the branches of this question except the matter of water rights. It seems to me the proper thing to introduce that, or for them to introduce that as a commencement in the matter.

Mr. WORKS: Mr. Boal has these papers, and he has not got in yet. Now Mr. Chairman, the counsel on the other side seem to desire that we should commence by offering this tabulated statement. Mr. Boal has not come in yet, but he handed me this as being a correct statement from the books. There has been one slight change made in it since Mr. Haines was furnished with a copy, in one column. If it should turn out that it needs correction in any particular, of course we want to reserve the right to do that when Mr. Boal comes in. I understand, though, that it is a correct statement, but if anything of that kind should occur, I want it understood that I shall have the right to correct it. Shall I read this now?

Mr. SHAW: It will give us some idea of what it is.

Mr. WORKS (reading): "Maintenance of Sweetwater dam, pipelines and water-department expense." The amount is set out in different columns under different headings. First we have "General" next "Legal," next "Office," next "Water department," next "Taxes," next "Interest," next "Insurance;" the next is "Depreciation," first upon the dam, pipe line No. 1, pipe line No. 2, and the total, and then the receipts in the next column, the total receipts, and that is carried out for separate years. In the year 1888, the year ending 1888, under general, was $1895.24; legal $1000; office $1500; water department $1156.07; taxes $3441.67; interest $9625; insurance $24.50; that year there is nothing under the head
491 of depreciation; total $18,642.48; water rents, which is the credit side of the paper, $3991.31.

Year ending 1889, general $7122.78; legal $2500; office $1500; water department $1762.67; taxes $5456.72; interest $10,500, insurance $24.50; total $28,866.67; water rents, $11,054.86.

Year ending 1890, general $6000.53; legal $2500; office $1500; water department $1690.43; taxes $4303.19; interest $10,500; insurance $24.50; total $26,818.65; receipts $12,679.05.

Year ending 1891, general $9377.12; legal $2500; office $1500; water department $3393.02; taxes $2511.09; interest $10,500; insurance $24.50; total $29,805.73; water rents, $17,451.73.

Year ending 1892, general $8052.78; legal $2500; office $1500; water department $2628.61; taxes $2250.98; interest $10,500; insurance $24.50; total $27,456.87; water rents, $18,907.10.

Year ending 1893, general $8496.57; legal, $2500; office $1500; water department $2913.91; taxes $3494.63; interest $10,500; insurance $24.50; total $29,429.61; water rents, $22,255.86.

Year ending 1894, general $5224.83; legal $2500; office $1500; water department $2645.06; taxes $2810.16; interest $10,500; insurance $24.50; total $25,204.55; water rents, $24,564.67.

Year ending 1895, general $29,147.62; legal $1200; office $1500; water department $3386.54; taxes $3046.34; interest, $21,000; insurance $7.50; total, $59,288; water rents $23,839.03.

Year ending 1896, general $5000.71; legal $1200; office $2000; water department $3303.02; taxes $3444.20; interest $21,000; insurance $7.50; depreciation on the dam—and this covers the whole time from the beginning down to this year—$5874.21; depreciation on pipe line No. 1 $33,337.96; depreciation on pipe line No. 2, $4244.26; total $79,411.16; water rents $29,502.16.

To August 1st, 1897—this of course only covers part of the year—general $2549.74; legal $991.62; office $1166.66; water department $3426.90; taxes $1635.33; interest $12,250; insurance $4.50; depreciation on Sweetwater dam and reservoir, $4625.32; depreciation on pipe line No. 1 $19,453.91; depreciation on pipe line No. 2, $2475.27; total $47,579.25; water rents $13,146.18.

492

Then to make the year complete we have estimated to January 1st, 1898, general expenses, $1162.40; legal $500; office $883.33; water department $1000; taxes $1635.33; insurance $3.50; depreciation on Sewwtwater dam and reservoir $3304.50; depreciation on pipe line No. 1, $13,895.65; depreciation on pipe line No. 2, $1768.05; total, $24,102.76; water rents $9425.85—that is the estimated amount that will be realized the balance of the year for water.

The totals are: General $84,330.32; legal, $19,891.62; office $15,999.99; water department, $26,306.23; taxes, $34,029.64; interest $126,875; insurance, $194.50; depreciation on Sweetwater dam and reservoir, $13,804.03; depreciation on pipe line No. 1, $66,687.52; depreciation on pipe line No. 2, $8487.53; total, $396,606.43; total water rent $186,867.80.

Cost of Water System August 1st, 1897.

Sweetwater dam		$239,165.05
Sweetwater Reservoir lands		159,290.76
Pipe line National City	$183,753.90	
Pipe line outside "	442,797.63	
		626,551.53
Equipment		3,015.45
		$1,026,022.79

Now the board will notice that in making up this duplicate statement the interest has been included, because during that time the company was paying interest upon its bonds. That item would be a material one in fixing water rates within the city of National City, where there is no rate of interest required to be returned, by the order of the common council, but here, as I understand, the law, instead of taking into account these items of interest, the board will

simply have to fill in those with the amount of interest that
493 we are entitled to in making up the estimate of what we are entitled to receive. There are of course some other items here that may be questioned, but I suppose they will come up in the regular proceedings, but I call attention to this now because the question of interest here, as I understand it, that is the question of the amount of interest that we might have to pay, is wholly immaterial.

Mr. SHAW: And it might as well be eliminated from this proceeding.

Mr. WORKS: It might as well be eliminated, but this, of course, is simply a transcript from the books, showing all the purposes for which the money has been paid, but of course that interest claim is of no consequence in fixing the rates as I understand the law.

Mr. Boal says, in reading this insurance column I read $450.00 where it should be $4.50. Of course this paper will be filed, and if I have made any mistake in reading it it can be corrected by the paper itself.

It is agreed now, I believe, that the testimony of Mr. Schuyler, which was taken upon the hearing in a suit brought to determine the validity of an ordinance passed by the city of National City, may be read here instead of putting Mr. Schuyler upon the stand. While there are some matters here that may not be of any importance to us, or aid us in any way we will save time really by reading it instead of putting him on the stand and going all over it. Each of us reserve the right to put him upon the stand and ask him any questions we want to.

Mr. Works reads as follows:

J. *B.* SCHUYLER, being called as a witness for the complainant and being duly sworn by the special examiner to testify the truth, the whole truth and nothing but the truth in this cause, now testifies as follows:

By Mr. WORKS—Direct examination:

Q. Where do you reside?

494 A. I now live in Los Angeles.

Q. What is your occupation?

A. I am a civil engineer.

Q. How long have you been actively engaged in the practice of your profession?

A. I began the practice of my profession in 1869, twenty-six years.

Q. I wish you would state generally what the extent of your practice and experience as a civil engineer has been in connection with the construction and operation of water systems, reservoirs, dams and the like, and for what companies you have acted, either as constructing or consulting or managing engineer?

A. My first experience I would say in general was my engagement with the State engineering department as chief assistant in charge of the irrigation department, and in that capacity I conducted the investigation of the irrigation works throughout the

State of California, and was in charge of the measurement of waters and the calculation of irrigation statistics and data in all parts of the State. Prior to that, however, I had had considerable work in connection with the water works of San Francisco and Oakland as consulting engineer of various improvements proposed. The work with the State engineer lasted for some years. It was interrupted by an offer of an engagement to come to San Diego to take charge of the construction of the Sweetwater dam. This work was begun in January, 1887, and continued until its completion in April, 1888. After the completion of the dam and distributing system I continued as consulting engineer for the company until some three years ago I think it was. And since then, whenever any important work has been in progress, I have been called upon by the same company. I have had charge of the construction of works in Denver as the consulting engineer for the Citizens' Water Company for some three years. I de-
495 signed the works of the Bear River Canal and Irrigation Company in Utah. I have constructed four large reservoirs in the city of Portland. I have been called upon as consulting engineer for a large number of irrigation companies and irrigation districts, which I will not take the time to enumerate, but they are scattered in all parts of this country as well as in the Sandwich islands.

Q. You say you were first connected with the San Diego Land and Town Company as constructing engineer in January, 1887. How long did you continue to act as constructing engineer for that company?

A. Until the completion of the works.

Q. State generally what the works constructed under your supervision were?

A. The design and construction of the masonry dam and the pipe-distributing system connected therewith, and the preparation of the reservoir for use.

Q. Of what kind and what quality of pipe generally speaking did this pipe line consist?

A. The main pipe line, starting at the Sweetwater dam, consisted of about 1500 feet of 36-inch wrought-iron pipe of No. 7 Birmingham wire *guage*, from the dam to the exit of the canyon into the valley proper, where a blow-off pipe was located, and the main line reduced in diameter to 30 inches. This diameter continued of the same quality of pipe, slightly thinner—my recollection is that the *guage* was No. 8 and 9 for the remainder of the line to Chula Vista, to the junction of what is known as E street and Fourth avenue, Chula Vista, where the pipe was reduced to two 24-inch lines, one running west on E street as far as the National avenue, or near there the other running south for a mile on Fourth avenue. The 24-inch line that I refer to was partially of spiral riveted pipe, I don't remember the thickness. A portion of it however was the wrought-iron riveted pipe made by the Risdon Iron Works of
496 San Francisco, who furnished all the wrought-iron pipe with the exception of the spiral bought from the East and the kalamined lap-welded tube. By referring to a paper which I prepared after

the completion of the works for the American Society of Civil Engineers I could testify as to the percentage of each.

Q. You may refer to any memorandum made by yourself to refresh your recollection with reference to it.

(Witness refers to pamphlet.)

Mr. GIBSON: What page do you refer to, Mr. Schuyler?

WITNESS: I was looking at the memorandum of the classification of the pipe, on page 215 of that report. About nine per cent. of the total number of feet laid at that time consisted of the spiral riveted pipe; about 72 per cent. was the kalamined tube; about 19 per cent. the wrought-iron pipe made by the Risdon iron works.

Q. You may state whether or not the material used in the construction of the dam and the pipe line was proper and suitable material to have been used in construction work of that kind?

A. It was my aim and that of the company to put nothing in the works but the very best material in every part, not only in the construction of the dam, the best of cement that could be obtained was used, and very liberally used; the rock was selected, the very best that could be had in the neighborhood, and it was very carefully prepared, and every stone well cleaned and washed and scrubbed by hand; and the best of care that could possibly be taken throughout the work was taken to make it first class in every respect. And so with the valves and with the pipes, the best of materials that could be obtained were obtained.

Q. Was any part of the material used in either the dam or the pipe line found to be defective subsequently?

A. Yes sir. The spiral pipe was found to be defective. In the course of transportation across the continent, it came across in very hot weather, it had lost a portion of its coating, and became thoroughly shaken up; and it would have been desirable to
497 have redipped it, and possibly if it had been redipped at the time it would have proven to be, as it has elsewhere, a serviceable pipe.

Q. Were you familiar with the quality of that class of pipe at that time?

A. I had never seen any of it except at the shop. I visited the shop some years previously and saw the process of making the pipe.

Q. Were you able to discover the defective quality of the pipe before it was actually used?

A. No sir; it didn't show any manifestation of weakness.

Q. How did you ascertain what the defective quality of it was, or how it became defective?

A. After the pressure was turned on it proved to be leaky in a great many places, and although the leaks originally were chiefly at the joints it continued to leak in the spiral seams.

Q. Can you state what amount that part of the pipe cost the company?

A. I thought I had a memorandum of the cost of each quality of pipe specified in this paper, but I don't find it at this moment.

Q. Here is a paper that may refresh your recollection on the subject.

Mr. GIBSON: What is the witness referring to now?

Mr. WORKS: It is the appendix to one of these reports.

WITNESS: I had this data at the time but I didn't incorporate it evidently in the paper. But from the data furnished me in this report I find that the total cost of that class of pipe was $34,599.92.

Q. You may state whether, if the defective quality of that pipe had been known at the time, it would have been used in the system.

498 A. Most certainly not. It was a subject of great annoyance to every one concerned to find, after taking so much pains with the entire system, that there was a link of defective pipe in it.

Q. Was the defect such as could be easily detected without the actual use of the pipe and subjecting the pipe to pressure?

A. Not without putting each section of the pipe in a testing machine, and as that is not customary and we had no testing machine it was not done. The pipe was supposed to be tested before it started, and it was furnished with a guarantee that it had been tested. I think the pressure to which that guarantee of test was made was something over 300 pounds to the square inch.

Q. What was the actual test to which the pipe was subjected after it was put in use?

A. The maximum pressure upon any portion of it was less than 100 pounds. I don't recollect what the maximum was, but it was between 50 and 100 pounds I think.

Q. With reference to the balance of the material put into the pipe line, aside from this spiral pipe, you may state whether or not the quality of the balance of it was good?

A. I consider the pipe today to be without any superior in the State in irrigation works or in water works generally.

Q. Was the kind of pipe used, that is, the class of pipe, such as is generally and ordinarily used in that kind of work?

A. Yes sir. The wrought-iron pipe was precisely of that class and type and character which was used in the city of San Francisco and has been used for some twenty years. Before recommending that sort of pipe I visited San Francisco and renewed the information that I had previously obtained about the durable quality of this class of pipe up there, and found that they had taken out some pipe which had been in the ground for twenty years and was in perfect condition. The lap-welded kalamined tube is admitted to be a superior pipe for use anywhere in the United States. It is used in

499 the Eastern States in competition with cast-iron pipe, and frequently preferred even though the price is somewhat greater. It is preferred in the sections where natural gas is used; it will stand a much higher pressure than any other pipe which can be obtained, and can be kept tight. It is a pipe that is prepared with unusual care, the thickness being very much greater than would be required for the static pressure it ordinarily has to stand; and it is welded so carefully that the seam cannot be discovered;

and in addition to that it is carefully cleaned with acids and dipped in a bath of molten metals which are generally non-corrosive, and is prepared for withstanding all the ordinary acids or alkali-s that are found in most soils. There are some elements in the soils of this country which seem to be particularly severe upon all pipes.

Q. What do you mean by "this country"?

A. I mean southern California.

Q. Is that true in this section where this system was put in?

A. That is true through this section—yes.

Q. Are you able to state what that destructive quality of the soil is?

A. I have never made an analysis of the soil, or had it made to discover what that was. I was more interested in the effect than in the cause, or the analysis of the cause.

Q. I wish you would state whether in your judgment the system constructed for the supply of that section, including the dam; reservoir and pipe lines—the entire system—was necessary and proper to be constructed for supplying the territory sought to be covered by the system supplied with water?

A. It was not only necessary, but it was indispensable. There was no other means of obtaining an adequate supply for that region.

Q. You may state whether in your judgment the amount of money expended in the construction of the system was proper to have been expended for that purpose, proper and reasonable?

A. The expenditure was entirely proper, and as reasonable
500 as the markets of the time would permit. Labor was high at that time, and materials generally were high, but at the time of the construction the work could not have been constructed for less money and with the same degree of stability. The work was done by the day, and the best of skilled foremen obtainable were in charge of the different departments; and I was in immediate charge myself, and endeavored to keep a careful lookout in all directions to prevent possible extravagance or waste and dishonesty, or leaks of kindred character, and I am sure that the administration was as thorough and as careful as could have been obtained.

Q. Were you then, and are you now, familiar with the source of water supply for the Sweetwater river?

A. Yes sir.

Q. I wish you would state as fully as you can what the source or sources were?

A. The only source of supply is that of an intermittent stream called the Sweetwater river, which heads in the Cuyamaca mountains and at times is a raging torrent, and at other times is a dry brook. The catchment of the water is that of the winter storms. There are no summer rains of any moment that produce a run-off which reaches the reservoir.

Q. Is there any living stream emptying into the reservoir?

A. The Sweetwater is not what would be considered a living stream. It is dry part of the year, and consequently is not a living stream.

Q. About how much of the year is there an entire lack of flow into the reservoir from the Sweetwater, of an average season?

A. I think from four to six months, sometimes longer.

Q. Is there likely to be any flow at all into the reservoir during what is known in this section of the country as the irrigation season?

A. Not of any moment—no sir.

501 Q. What is the capacity of the reservoir in inches?

A. What do you refer to, inches of perpetual flow or inches of flow during the irrigation season?

Q. Inches of perpetual flow.

A. Our computation of the capacity of the reservoir has been made in cubic feet and gallons, and I don't recollect what it may be in inches nat the moment. (Makes computation.) About 1240 perpetual flow, miners' inches under a four-inch pressure.

Q. What knowledge have you had, if any, of the actual experience of the company with reference to the quantity of water used and the necessity for holding over a part of the water supply from one season to another?

A. I have examined the records from time to time in the past and was interested to see the quantity of water that they were using as compared with the prognostication that I had made as to what might be sufficient, and have been surprised to find that the use has exceeded what I supposed would have been sufficient. The amount required thus far appears to have been somewhat over the acre foot during the irrigation season. An acre foot is about 312,000 gallons per acre. And my recollection of the records is that the use has exceeded that considerably.

Q. My question was as to what you would regard as a safe amount of water to hold over from one year to another in the reservoir, considering the danger of dry years?

A. I have always felt that—I have been sure it was necessary to hold over from forty to fifty per cent. of the total reservoir capacity for emergencies and the record of the floods of 1891–'2 I think and also of 1893–'4—1890–'91 was the dryer year—1890–'91 and *and* 1893–'4 proved very conclusively that that reserve was none too great. 1891–'2 was the dry year I find not 1890–'1 In 1891–'2 the run-off as measured at the dam was 267,000,000 cubic feet; and in 1893–'4 it was only 60,000,000 cubic feet.

502 Q. Your paper read before the American Society of Civil Engineers has been quoted from here to the effect that in your opinion the reservoir and the supply of water that might be store- there would be able to furnish 20,000 acres of land with water sufficient for irrigation purposes. Have you had any reason since preparing that paper to modify your conclusion with reference to that matter as a result of the actual experience of the company?

A. I have a great many reasons for modifying that opinion. At the time that that report was made, or that paper was prepared, the information obtainable as to the run-off of the streams of San Diego county, as well as the water required in irrigation, was extremely meager. There was a general impression that this country did not

require irrigation very much, and the real-estate men—we all had something to do with real estate at that time—were joined in that impression and carried it alone. Experience in actual measurement of the streams had not been had at that time. There had been no experience in San Diego county in irrigation to any great extent except with wind-mills, and when a man pumps water with a wind-mill or with a steam pump he uses a very small quantity; and the data based upon observations of extremely small use like that are apt to be deceiving. At any rate the conclusions which I have drawn in that paper were prepared during the height of the boom, and with insufficient data upon which to base an opinion as to the quantity of water required, and particularly as to the quantity of water that would be likely to be yielded by the water-sheds of this region. The percentages which observation had given as to the run-off from the rainfall for other localities do not appear to apply here at all, and the actual results of measurements of the streams afford entirely different conclusions from those which were supposed reliable at that time.

Q. Well, judging from the knowledge you have since acquired, and particularly from the actual experience of this company,
503 what is your judgment now as to what amount of land the company can safely obligate itself to furnish with water from that system?

A. I don't think that the duty of the reservoir could be counted upon in excess of one-third of the estimate given in that paper.

Q. Do you think that is a pretty liberal estimate, one-third?

A. I think that would be a liberal estimate. As the orchards grow older they seem to require more water. We even yet have not had the experience of the requirements of an orchard of twenty years of age; and it is the experience in other parts of southern California that orchards require more and more water as they grow older, as the fruitage is greater and the amount of foliage is greater.

Q. What is the elevation of the dam?

A. The top of the dam is at an elevation of 215 feet above sea-level.

Q. And the connection of the pipe line with the dam, what is the elevation of that?

A. The lowest outlet is 70 feet below that, 145 feet above sea-level.

Q. At what elevation can water be safely and economically supplied from the dam for irrigation purposes?

A. (Witness consults paper.) When the lower half of the reservoir capacity comes to be used it will be necessary to draw the reservoir down to an elevation of 155 or 160 feet. I do not think it would be wise or proper to attempt to supply lands above a grade line starting at an elevation of 160 feet and terminating at such point as would be required for the delivery of the water.

Q. What would that probably be?

A. About 140 feet.

Q. Do you know what the elevation of what is known as the pipe line No. 2 from the dam down its entire length is?

504 A. Pipe line No. 2 is the new pipe line recently finished?

Q. Yes.

A. My recollection of that is that it leaves the dam at an elevation of 165 or 170 feet, and follows along the north side of the valley of the Sweetwater as near a hydraulic grade line of five feet per mile as possible, dipping occasionally to the level of the valley, or nearly so, and rising to the hydraulic grade line again, and terminating in National City at an elevation of 140 feet or thereabouts.

Q. Do you think it would be safe or advisable for the company to undertake to deliver water for irrigation above the elevation of that pipe line No. 2?

A. Not with that pipe line. At the time the pipe system was designed it was my intention, my recommendation, that a higher line be built; and for that purpose I put in foundations for pumps at the dam to be operated by water power and lift water to the top of the mesa where the higher line was to be located.

Q. That could only be done by adding to the system and incurring additional expense?

A. Yes sir.

Q. But I am speaking now of the system as it is at present?

A. The system as it is would find difficulty in supplying lands very much higher than 140 or 150 feet, or above the hydraulic grade line of this second pipe.

Q. Suppose that the quantity of land below that 140 feet contour line is greater than the actual duty of the reservoir would it be policy then to attempt to deliver water above that line?

A. It would not be policy to attempt to deliver water above that line—no sir.

Q. Are you able to state from your knowledge and observation what quantity of water in the Sweetwater reservoir is lost by
505 evaporation?

A. I made observations of the loss by evaporation while I was with the company for a number of years. (Consults paper.) In the year 1889 I found the loss to be 57 54/100 inches of depth. This was measured in an evaporating pan three feet square, about 2½ feet deep floating in the lake. In the year 1890 I think it was we obtained from the United States Signal Service two Piche evaporometers, which were observed in connection with the pans. In 1890 the evaporation was found about 59 inches; in 1891, 58¼ inches; in 1892, 59½ inches; in 1893, after the pans were discontinued, the evaporometers were only taken, and show less results—50 86/100 inches; and in 1894, 45 7/10 inches.

Q. Can you tell us about what percentage that would be?

A. The percentage of loss from the reservoir would depend upon the state of water in the reservoir. There being a constant quantity taken out by evaporation, the percentage of the volume of the water in the reservoir would depend upon the stage of water in the reservoir and the area of the reservoir exposed. (Makes computation.) That will range from twenty to forty per cent., according to the height of the water in the reservoir. At the full reservoir the percentage would be of smaller amount.

Mr. HAINES: I understand that there he wants to make a correction.

Mr. WORKS: Was there some correction you wanted to make there Mr. Schuyler?

Mr. SCHUYLER: Yes sir.

Mr. WORKS: I do not know but what we had better finish this reading and then correct it afterwards. (Reads.)

Q. You have spoken of the quality of the soil here as being detrimental to the pipes. I wish you would explain, or state rather, for what length of time pipes such as are used in this system may reasonable be expected to last, in the kind of soil in which it is placed?

506 A. They ought to last from ten to twenty years.

Q. What would be a fair average for the whole system?

A. If I were to estimate it, I should say fifteen years.

By Mr. GIBSON—Cross-examination:

Q. What you say of the life of a pipe and of the average of fifteen years, is that on the assumption that every portion of it passes through soil that is injurious to it in the manner you have specified heretofore?

A. No sir; but the average as it would be encountered in laying a pipe system through different soils.

Q. Then some portions of it might last many years longer, and be in as good condition as the pipe was that you saw in San Francisco after it had been in the ground twenty years; and yet in other portions where there are injurious ingredients in the soil that would act upon the pipe to its detriment, it might wear out sooner—is that it?

A. Yes sir. There are some soils where a pipe line may not last more than three or four years. I think some of the pipe has been taken out and replaced within two or three years.

Q. That is only in small sections?

A. Yes sir, comparatively small sections. It would be very discouraging if the entire system should show that weakness.

Q. Then you do not wish to be understood as saying that the injurious ingredients found in the soil of California extend throughout all the soil, but only in small sections in different localities—is that the idea?

A. It is to be found more or less active in all soils, and particularly in all the mesa soils. I think in the sandy bottoms where the salts and alkalis are more easily washed out, there is less deleterious action upon pipes than anywhere else. But on the mesas we encounter elements that are very severe upon iron, and also upon the asphalt coating. I have noticed a kind of white clay that

507 seems to take the life out of asphalt in a very short time.

Q. I believe you have already said that these injurious ingredients, whatever they may be, are only found along different sections of this particular pipe line in question?

A. The injurious elements seem to be quite generally distributed over the country; but those which are most active and which would destroy a pipe within two or three or four years are not so common as other elements that are active more slowly. I mean to say that

it is not general to find a destructive action that will destroy a pipe within two or three years but that it does take place occasionally in all sections of this country.

Q. When you say that the loss by evaporation is from twenty to forty per cent., according to the stage of water in the reservoir, do you mean that of the whole mass of water?

A. I mean the percentage of the water remaining in the reservoir at that time.

Q. That is to say, if at a certain stage there would be a loss of 40 per cent., there would be but 60 per cent. remaining of the original quantity?

A. Yes sir; let me explain that. I mean to say this, if at the elevation of the full reservoir a certain percentage of loss was observed it would be applied to the total capacity of the reservoir at that point. But the percentage which I referred to, the higher percentage of forty per cent., was applicable not to the entire volume of the capacity of the reservoir but to the capacity at that elevation, at the lower elevation.

Q. Then as you reach the lower points or contours the percentage increases?

A. The percentage increases—yes sir.

Q. Referring to the cost of the structures which you have mentioned, namely, the dam and pipe line No. 1, you say that material and labor were high at the time they were constructed, and you have referred to your report. Do you not also say, on page
508 214, in that connection, that these conditions increased the cost of the work twenty to twenty-five per cent. above the normal?

A. Yes sir. Those conditions were the high state of the labor market and the high prices prevailing for materials generally. The cost of cement at that time was higher than it has ever been since that time; and I think that is true of all the materials entering into the construction of the pipes.

Q. What could the dam and pipe line be constructed for, in other words duplicated for, in February last?

Mr. WORKS: Objected to as immaterial, irrelevant and incompetent.

Mr. WORKS: That is an objection that we will insist upon here, but it is not necessary to take up the time in discussing it now. It arises upon the basis of fixing the rates. (Continues to read.)

A. I think that the entire system could be duplicated for certainly as much less as the percentages I have named on page 214, and possibly below that.

Q. How much below that?

A. Well, it is difficult to compute.

Q. We don't expect you to make an exact computation, but from your knowledge of the cost of materials and also the cost of labor——

Mr. WORKS: Let it be understood that all this line of examination is objected to on the same ground as before stated.

Mr. GIBSON: All right.

Q. —and the facilities for obtaining both.

A. I think I could build the dam for at least seventy per cent. of the original cost. You speak of the date of February last?

Q. Yes sir.

A. In February the cost of pipe was probably considerably less than it is now, and I should judge that about the same per-
509 centage might be applied to that, that is, you might say that the pipe system could be duplicated for 65 or 70 per cent. of the original cost.

Q. Do you remember the number of guage, wire guage, that the spiral pipe was constructed of?

A. No, I do not. I think it was about No. 16; some of it I think was No. 14 and possibly higher. I don't know but the 24-inch was No. 12.

Q. Was not most of it from 14 to 16?

A. The greater portion of it was more than 24 inches in diameter; and I think that is true for the 6, 8 and 12 inch pipe, which constitutes the larger portion of the spiral pipe but I think the 24-inch pipe was No. 12. That is my recollection of it; however, I am not positive as to that, but that is my impression.

Q. Would you not as an engineer say that from 14 to 16 inch guage is too light for pipe constructed in that manner and for the service expected of it?

A. Not for pipe constructed in that manner, spiral riveted pipe has a capacity for standing very high pressures. The spiral twist that it has, the turn, seems to increase its strength, for the reason that it has the lines of lamination more nearly in the direction opposing the pressure. The theory of spiral riveted pipe is all right. The sample we obtained of it was an unfortunate one. With ordinary straight riveted pipe the amount that is cut away by the punching of the rivet holes reduces the strength of it some forty per cent. or more, but that is not the case with the spiral riveted pipe to so great a degree at least.

Q. Do you not say in the paper that you referred to in your examination-in-chief, I refer to page 215 at the bottom part of the page; "The introduction of the spiral pipe into the system was unfortunate, as it does not stand the test of transportation across the conti-
nent, and will have to be taken up and specially treated to
510 make it water-tight. It will answer very well for sub-irrigation, if it could be properly controlled, but as it is laid in streets and avenues that system is not desirable or conducive to comfort in traveling." Did you not so state?

A. I recollect those were my sentiments then, and now.

Q. If the transportation of it across the continent affected the protective covering why was it put down in trenches and covered over in that condition?

A. Because that fact was not discovered until after it was laid and tested and could not have been.

Q. Do you mean to say that the inspection of the pipe would not have discovered its weakness in that regard?

A. Not at all—no sir.

Q. How did you reach the conclusion that it was subjected to a high degree of heat in being transported across the continent?

A. From my general knowledge of the condition of the weather at that time.

Q. You knew that before the pipe went into the ground?

A. Yes sir.

Q. And yet at that time you didn't think it affected the character of the pipe or the integrity of the pipe?

A. No. Some of the coating had melted so as to drip as the pipe lay on its side—drip off it a little bit. But the agent of the company, who was present and took the contract for laying the pipe, did not seem to think that that affected its condition at all, and advised laying it and did lay it.

Q. It was laid under your supervision?

A. Yes sir.

Q. And if you had objected other pipe would have been substituted?

A. I think not. There was no possibility of substituting other pipe. That pipe had been purchased for the purpose and was supposed to be good as all the rest of it; and there was no indication by appearances or by general report or for any other reason,
511 that the pipe was not first class. The dripping of the coating was not such as to indicate any probability of the pipe leaking when it was put under pressure, and I don't think that any one could have looked at that pipe at that time and have said positively that it ought to have a fresh coating of asphalt.

Q. Would you recommend now the laying of such pipe for the purposes for which the spiral pipe was laid?

A. I would not recommend the spiral pipe under any circumstances for any purpose whatever.

Q. Why?

A. Because the one experience of it is sufficient; I don't want any more.

Q. You said it had served well elsewhere?

A. That was the reputation that it had and the information that I could obtain of it. I had had no personal experience with it.

Q. Had it been used on this coast elsewhere?

A. It had been used in one place, at Hesperia, California.

Q. That is out on the desert?

A. Yes sir.

Q. Mojave desert?

A. Yes, sir. I didn't go there to inspect the pipe, but had a talk with Mr. Whitney in regard to it before the pipe was ordered. And when Col. Dickinson went to Boston to see about the purchase of the pipe and about the extension of the dam, I recommended that he visit the works. I had been to the works myself, and I recommended that he go there and take a look at it. He did so, and before I knew anything further of it he made the order for the pipe.

Mr. WORKS: How was Col. Dickinson connected with the company then?

WITNESS: Col. Dickinson was general manager of the company.

Q. You recommended the purchase of the pipe? It was
512 purchased on your recommendation was it not?

A. No sir. I didn't recommend the purchase of the pipe. I recommended that he visit the works and investigate the pipe.

Q. Didn't you make any representations to him as to its quality and character?

A. I simply told him that I had been to the works and seen the pipe. It seemed to me to be rather a novel pipe, and while he was East he would do well to go there and look at it. If I had supposed that the pipe was to be ordered on that visit by him at that time I should have preferred specifications and a list of the different sizes, where we could best use different classes of pipe, if there was to be more than one class of pipe used; but all the pipe was purchased at that time entirely without my knowledge. When the pipe came, we laid it and put it into the places where I could use it to the best advantage.

Q. What are the functions of a consulting engineer?

A. The functions of a consulting engineer are of an advisory nature.

Q. To advise as to designs?

A. Yes sir.

Q. And the construction of works, including the material and preparation of the same?

A. Yes sir; preparation of specifications, preparation of plans frequently, and the advising of those in charge of the works as to methods and policies and so forth.

Q. And you occupied that relation with regard to the San Diego Land and Town Company, did you not?

A. Subsequent to the completion of the works, yes sir.

Q. Not before?

A. Not before.

Q. What was your connection with the company and your duties prior to that time?

A. I was placed in charge of the construction of the water
513 works without any special assignment of duties, or without title. I was the only engineer of the company, or the chief engineer.

Q. Do you mean to be understood as saying that as chief engineer you received whatever material was brought to you or furnished to you for the construction of the works, and laid it without special regard to its fitness and durability?

A. Not at all. I only used such materials as were fit and suitable in my judgment; but when the pipe was ordered it was all laid, whatever came; I regarded it all as fit and durable. It was carefully inspected and received—considered to be first class in every respect.

Q. How many acres was the pipe line No. 1 designed to supply?

A. Pipe line No. 1 was projected for the supply of Chula Vista and National City. It was considered to be sufficient for the area of land within those limits, or nearly so, although there was considered

in the plan another pipe line on the other side of the river to be laid whenever required.

Q. How many acres was pipe line No. 1 designed to irrigate?

A. It was designed to be used up to its full capacity in irrigation and supplemented by another pipe whenever needed. It was not designed for any special number of acres, because the duty of water, as I say, was not determined at that time.

Q. How many inches of water would the pipe line deliver?

A. If I remember rightly, the capacity of the pipe to Chula Vista was about 850 inches.

Q. And how much to National City?

A. The 18-inch pipe leading to National City has a capacity of between 250 and 300 inches.

Q. Then the pipe line had a capacity of from 1150 to 1200 inches?

A. No sir; I don't mean to say that.

Q. I understand that the same pipe line supplies both

514 localities.

A. Yes sir. 850 inches is the capacity of the line to Chula Vista, and the National City pipe received its water from the Chula Vista pipe.

Q. Well, how much water would the 30-inch pipe deliver at the point where it connects with the distributing pipes of National City and Chula Vista?

A. It is so long since I have thought of this system that I don't recollect the figures. I designed that 30-inch pipe to carry the average capacity of the reservoir.

Q. 1200 inches?

A. 1200 inches—yes sir—to deliver 1200 inches to an elevation of 90 feet in Chula Vista.

Q. And at what elevation in National City?

A. The pipes are laid to elevations in National City somewhat higher than that I think.

Q. Does not the height of the elevation affect the capacity of the pipe—I mean the elevation of the point of discharge

A. Naturally, yes sir.

Q. Do you remember the 12-inch ex-mission pipe going up there on the north of National City on the topographical map?

A. Yes sir.

Q. What is the capacity of that pipe?

A. I don't remember.

Q. Could you tell us without taking too much time?

A. I think I had better make a note of it and compute it and bring it in at another time.

Witness subsequently brought in the following statement.

"If the 12-inch ex-mission pipe were cut off at the north line of the National ranch its capacity would be about 200 miners' inches, but as the lands irrigated are chiefly more than 100 feet higher than that point the capacity of delivery to those lands would be less than 100 inches.—Jas. D. Schuyler."

515 "P. S.—In my testimony I stated that one acre foot was about 312,000 gallons. This I wish to correct to about 326,000 gallons, or exactly 325,851 gallons. J. D. Schuyler."

Q. The capacity of the reservoir, the total capacity is 1240 inches perpetual flow. By that you mean for 365 days in the year?

A. Yes sir that is without counting loss by evaporation.

Q. That is the total capacity I understand, without making any deduction for loss by evaporation or otherwise?

A. Yes sir.

Q. Now when, say, the irrigation extends over a period of from 150 to 200 days—you have it 150 I think in your report, and it has been heretofore testified that the irrigation season covers a period of 200 days—and the consumer is furnished say with 10 inches of water, what period does that cover the irrigation season or the 365 days?

A. Water is not furnished to consumers by the inch.

Mr. WORKS: Objected to on the ground that it is immaterial, irrelevant and incompetent, and that it appears by the evidence that the complainant is not furnishing water to consumers by the inch.

Q. Assuming that water is furnished by the inch?

Mr. WORKS: It is objected to as immaterial, irrelevant and incompetent and on the further ground that the question asks the witness to determine a question of law as to what the consumer is entitled to *to* receive under his contract for water.

A. That would be entirely a matter of agreement between the irrigator and the company or the person who furnished the water. If the irrigator agreed to take his water in perpetual flow it would be perpetual flow; if he agreed to take it and pay for it only during the irrigation season that would be the understanding.

Q. It would be onl*t* 200/365ths of that quantity?

A. If he so agreed.

516 Q. But supposing there was no agreement, supposing they agreed to furnish for irrigation and sell water on the basis of one inch to so many acres, say one inch to seven acres?

Mr. WORKS: Same objection.

A. I can't conceive how a man could take water without any agreement preliminary to his taking it.

Q. Assuming that there is no agreement, that the consumer has say seven acres of land to irrigate and the company is selling or furnishing water on the basis of one inch to seven acres and it would require an inch of water to irrigate his land, and he demands that of the company in the ordinary manner that consumers demand their water from the San Diego Land and Town Company—for what period would the company furnish him that one inch of water for his seven acres for 200 days or 365 days?

Mr. WORKS: Same objection; and the additional objection that

the assumption contained in the question is not warranted by any evidence yet taken.

A. For whatever period the consumer would demand it, I presume, if there were no agreement. He would be apt however to want to prorate and if he were only entitled by custom or by understanding or by an agreement to an inch to seven acres perpetual flow he would naturally want to prorate that and concentrate it to a shorter time, and instead of taking water at that rate in the winter time to take water at a greater rate or double that rate during the ordinary irrigation season.

Q. You were connected with the company while it was furnishing water for irrigation were you not?

A. Yes sir.

Q. Upon what basis did it furnish water for irrigation?

A. There was no limitation for a number of years as to the amount of water an irrigator should use, but it was understood that for the time being until the country was more completely settled up that every one should have all the water that they thought was necessary; but after a little regulations were adopted limiting the
517 volume of supply to about one acre foot.

Q. When a consumer received water on that basis of one acre foot did he receive the water necessary to cover every foot of his land one foot deep at least once a year all at one time or was it distributed throughout the whole year or confined to the irrigation season of about 200 days?

A. That was generally at the irrigator's option except that it was naturally restricted by the size of the pipe that he received his water through. It would be quite impossible for him to take all his water at one time in one day or in one week. Nor would his ground require it. There would be a reasonable restriction in that regard even if he should want to go to excess. It is customary to distribute and prorate the distribution of water throughout the ordinary irrigating season.

Q. But supposing the company is under obligation to supply a consumer say one inch of water for seven acres of land, or an acre foot—put it on that basis—for seven acres, and his crop should be such that during the ordinary irrigation season he would not require all his water but that by the use of water during the irrigation season by others the supply in the reservoir should be exhausted, and he should demand that his water should flow continuously; not having pipe large enough to take it in any other manner, how would he get his supply?

A. That is a hypothetical case that I could not very well conceive of, because I don't know of any crops grown in this country that are not irrigated during the ordinary irrigation season and that require irrigation out of the irrigation season.

Q. Is it not a fact that citrus trees are irrigated in the fall, in November, and December of dry years?

A. That is a fact—yes sir,—sometimes.

Q. And also alfalfa.

A. I don't know of alfalfa being irrigated in the winter season.

518 Q. And in dry seasons sometimes the rain does not occur in this country to amount to anything until about Christmas, is not that so?

A. Yes that is so.

Q. And supposing the summer is dry, as it ordinarily is, would he not require to irrigate his alfalfa crop—would not the grower of alfalfa be required to irrigate it until the winter rain should commence?

A. He might require water in the rainy season to some extent, but he would consume the greater portion of his water in the irrigating season.

Q. But still he would require some of it beyond that?

A. It is quite possible that he would require some of it beyond that, but it would be to such a small extent generally that if his pipe were proportioned to take care of his crop in the irrigating season, he would certainly get his water supply in the rainy season.

Q. But don't you know that where alfalfa is grown on mesa land, dry land, that it requires more irrigation and covering a longer period than where it is grown upon moist bottom land?

A. I don't know that it requires irrigation for a longer period.

Q. What I mean to say is extending over a longer period?

A. Not necessarily—no sir. Alfalfa is irrigated every time it is cut wherever it is located, that is the custom in this country.

Q. But does it not require more water on dry uplands than it does in bottom lands?

A. I don't know that it does.

Q. And will it not die out sooner on upper lands without water during the dry falls such as we have in this country than it will on bottom lands?

519 A. Yes, if the roots don't reach the permanent water and it is not irrigated alfalfa will die in any situation.

Q. Is not permanent water from 30 to 100 feet below the surface of the soil on the mesa?

A. Yes sir usually.

Q. And in the bottom lands it is seldom over ten feet from the surface?

A. Yes sir.

Q. And is usually within a foot or two of the surface—is not that so?

A. Bottom lands are usually well supplied with subsurface water which help out the life of alfalfa and frequently there are moist lands where alfalfa requires no irrigation whatever.

Q. Now before you were called to assume the construction of the Sweetwater reservoir or dam you were employed you say in the State engineering department?

A. Yes sir.

Q. And in the discharge of the duties of that department you had to examine various sections of the State and report upon the water supply and gather and report statistics relating to irrigation?

A. That is true.

Q. Were there not large sections under irrigation in southern California and have been for many years prior to the commencement of the construction of the Sweetwater reservoir system?

A. Yes sir.

Q. Such sections were found in Los Angeles and San Bernardino county and what is now Riverside county and also what is now Orange county formerly a portion of Los Angeles county, and also in central and northern portion of San Diego county?

A. I examined all those questions—yes sir. There was very little irrigation in any part of San Diego county at that time.

520 Q. There were some portions that were irrigated and had been for a great many years were there not?

A. There was very scanty irrigation in San Diego county.

Q. Taking it as compared with irrigation in other counties it was small, but yet there were considerable tracts in different places that were under irrigation?

A. The only tracts that I call to mind were the bottom lands of the Santa Margarita ranch irrigated from the Temecula creek.

Q. Were there not tracts in Poway valley and also along the San Luis Rey river?

A. There were a few tracts along the San Luis Rey river. I don't know of anything in Poway that was irrigated. There were irrigations scattered through the country from irrigation supplied by wind-mills.

Q. Is there not one of the oldest irrigation districts in the county in the Poway valley taking water from the Poway or Santa Ysabel river?

A. There are two distinct streams.

Q. What is the name of that river there?

A. Do you refer to the Penasquitas or the San Pasqual?

Q. San Pasqual, that is what I am trying to think of instead of the Poway.

A. There were small irrigations in San Pasqual, but quite insignificant.

Q. But yet there was enough to show what could be done with irrigation and how much water was necessary to produce certain kinds of crops?

A. None of those examples that you have cited were at all parallel to the situation that we had to confront in the preparation of plans for irrigating the mesas of Chula Vista and National City.

Q. Well, Riverside was a large irrigated section at that
521 time, was it not, and consisting wholly of mesa land similar to the lands of National City?

A. Yes sir. But the irrigation at Riverside was from a flowing stream and at the outset when I made my examination there it was the general impression that they were using an extravagant quantity of water. They have since been increasing however their consumption of water and are now using something like an inch to four acres for the irrigation of their trees.

Q. Didn't they irrigate there for years and don't many of them yet irrigate upon the basis of one inch to seven acres?

A. They may have started to irrigate their young orchards on that basis; but the records of the Riverside Water Company—the measurements of water taken since they have started to sell water show an average delivery of about an inch to four acres, four and two-tenths acres.

Q. Do you affirm that of all the years that they have been irrigating?

A. It was somewhat less than that at the outset when their orchards were young.

Q. Is it not also a fact that large sections are irrigated from the Bear Valley system on the basis of one inch to seven acres in the San Bernardino valley?

A. My information about the irrigation of the Bear valley is that their average distribution is an inch to four acres. All of their class A certificates are on that basis. And in the Alessandro district they furnish water on that basis. When they went into the Alessandro district and laid out what was to be a model fruit colony they provided a supply of water of an inch to four acres, based on the experience of past years.

Q. Is not all the water that is supplied to irrigators of Riverside owned by the irrigators themselves?

Mr. WORKS: Objected to as immaterial, irrelevant and in-
522 competent.

Mr. GIBSON: It has a tendency to show the manner of use.

A. I really don't know whether the irrigators in Riverside are stockholders in the Riverside Water Company or not. I know that the water company sell water but whether the irrigators are stockholders in that company I am not aware.

Q. Don't you know that the territory of Riverside, when you examined it, was supplied by the Riverside Land and Irrigating Company organized upon about the same basis as the San Diego Land and Town Company, and that they furnished water to consumers on a basis of one inch to ten acres and that subsequently the Riverside Canal Company was formed and acquired the water rights of the Riverside Land and Irrigating Company but remained practically the same company—it was under the control of the former company—and that thereafter and about ten years ago the people organized a company and acquired the water right and that only landowners and stockholders in the company have the right to use the water? If the engineer's report is here we don't object to your referring to it to refresh your memory—I mean the State engineer's report.

A. There is a whole lot of it here.

Q. Then you can look it up this evening to refresh your mind.

A. I think I had better look that up and not detain you now.

Q. When was it first discovered that it would be necessary to carry over from forty to fifty per cent. of the total capacity of the reservoir for emergencies?

A. I think it was surmised at the outset and partially confirmed in 1891–'2 and very positively demonstrated in 1893–'4.

Q. And the pipe system was constructed on the basis of supplying the 1240 inches per annum was it?

A. The pipe system was not constructed with any special reference to any particular quantity except that the main pipe was, as I recollect it now, computed to deliver the full flow of the capacity of the reservoir to an elevation of 90 feet in Chula Vista. The
523 remaining pipe system was proportioned to supply the lands where it was laid what was supposed to be sufficient for their supply, with provision made for additional pipe to be laid; crosses were inserted in almost all the streets in National City at least and I think in Chula Vista every street was crossed for the attachment of cross-mains for the future.

Q. Look at this—that is class A certificate Bear Valley. (Hands witness paper.) After reading class A certificate issued by the Bear Valley Land and Water Company, I will ask you upon what basis were those certificates issued?

Mr. WORKS: Objected to as immaterial, irrelevant and incompetent; and the document shown to the witness does not appear to be what is stated in the question.

Mr. GIBSON: It is a copy of the certificate on file in the United States court.

A. I don't recognize it. I never have seen any of those certificates—I don't know.

Q. It is stated in what purports to be a certificate that it is one inch to seven acres instead of one inch to four acres is it not?

A. Yes sir.

Q. I think you will find the same statement in that book of engineering there—I refer to the State engineer's report. Now might you not also be mistaken as to the amount provided for the irrigation of land in the Alessandro district?

A. I don't think I am mistaken, no sir.

Q. Is it not true, Mr. Schuyler, and will you not so state from your experience as an engineer and from your knowledge of the respective localities that I am about to refer to, that it requires more water to irrigate an acre of land devoted to the growth of citrus fruits and vines in the vicinity of Riverside and Alessandro from sixty to seventy miles from the coast, than it does at the National ranch abutting on the coast?

524 A. I think that remains to be demonstrated by further experience. Having made an unfortunate prognostication about the use of water at one time I am a little bit timid about giving an opinion in regard to the consumption required.

Q. Is it not recognized then as a fact by others who are experienced in irrigation that it requires more water inland in the inland counties upon elevated mesas than it does at or near the coast?

A. Judging by the experience that has been had so far at Chula Vista, I don't think we are warranted in assuming that there is a

very great difference in the requirement of water in Chula Vista and in Riverside.

Q. Is it not generally regarded as being a fact that more water is required at Riverside and vicinity than at or near the coast?

A. There may be assumptions of that sort that are entirely erroneous. Experience is likely to demonstrate the fallacy of any such assumption, and as I say the indications are that from experience so far in Chula Vista such demonstration will be made. When the orchards in Chula Vista have the same age of those in Riverside I don't think that they will take appreciably less water.

Q. Take orchards of similar age—is it not a fact that it is generally understood and regarded by those experienced in irrigation that it requires more water in the interior than at the coast? No matter what your private opinion may be, is not that the general opinion?

Mr. WORKS: Objected to as immaterial, irrelevant and incompetent and as hearsay.

A. I have heard that opinion expressed. I don't — that we are justified however in giving any weight to anything but actual experience, especially when experience leads in the direction of the contrary opinion.

Q. Has not that been the prevailing and general under-
525 standing for a number of years last past?

Mr. WORKS: Same objection.

A. I have no doubt that is the general opinion. It is also the general opinion that the evaporation of water from lake surfaces is very much less near the coast than further back in the interior, but our experience does not seem to carry that out.

Q. That is a matter that is known to fewer than the practice of irrigation is known to is it not?

A. It may be, but it is directly connected with the same subject, and affected by the same general phenomena.

Q. Did you not find when you assumed charge of the construction of the Sweetwater dam that the Sweetwater river had many if not all of the characteristics that appertain to rivers in southern California, say in Los Angeles, San Bernardino and Riverside counties, and San Diego county?

A. The Sweetwater river bears no resemblance whatever to the principal rivers of Los Angeles and San Bernardino counties.

Q. Is there any river to your knowledge south of the Tehachapi range that runs a continuous stream from the head to its mouth during the entire year?

A. No; I don't know of any river that runs all the way through to the sea; but the principal rivers of Los Angeles and San Bernardino counties run large streams of water out through the valleys for a considerable distance into the valleys and there is one, the San Gabriel river I think, that runs all the way to the sea most years.

Q. Some years it does not?

A. Some years it may not quite reach it.

Q. Are there not places in the San Gabriel river where it is perfectly dry apparently on the surface in places, the water goes below and comes to the surface again at other points below at greater or lesser intervals?

A. The entire volume of water in the summer time in the San Gabriel river is taken out for irrigation at the mouth of the
526 canyon, and below for several miles it is dry, but it is reinforced by springs and cienegas.

Q. Is it not true also of the Santa Ana river from which the large sections of Riverside obtains its supply that a short distance above the point where it diverts the water from the river in the summer time that on the surface the river is dry?

A. I think the Santa Ana river would probably flow clear through to the sea, if it were not for the diversion of the water by irrigation.

Q. That is what I asked you. Is it not a fact that there are dry places above where Riverside takes its supply from the river?

A. The principal supply for Riverside is not taken from the Santa Ana river proper.

Q. A large portion of its supply—and the other portion from Warm creek that enters into the river.

A. Yes sir.

Q. The principal canal is the lower canal and takes its water from the river?

A. What was originally the principal canal takes its water from the river. The principal canal takes its water from Warm creek.

Q. That empties into the Santa —— river just above the old canal?

A. Yes sir.

Q. Are there not points above the heads of those respective canals in that river where it is dry and then again the water comes to the surface down near Chino, where another large ditch takes its water?

Mr. WORKS: I object to all this inquiry with reference to other rivers, as immaterial, irrelevant and incompetent.

Mr. GIBSON: I want to show the character of those rivers that they are not all on the surface.

A. The Santa Ana river differs entirely from the Sweetwater river and is properly a living stream. It is supplied and reinforced all the way along the valley by fresh supplies, springs coming in. Nothing of that sort can be found on the Sweetwater in the lower courses. There is no parallelism at all between the two streams.

Q. I don't mean to say or have you understand me as
527 thinking that the Sweetwater is equal to the Santa Ana, but I want to show that all rivers in California are variable, and that none of them perhaps with the exception that you have named of the San Gabriel flow any distance to any valley as a living continuous stream on the surface.

A. Both the San Gabriel and the Santa Ana river and other rivers of smaller size furnish constant supplies of water for canals for irrigation. That cannot be said of the Sweetwater; there is no supply

of water in the Sweetwater of any moment to supply any irrigation canals.

Q. Are there not other streams flowing from the same range of mountains that supplies the Santa Ana where the water does not reach the valley and yet they supply canals for irrigation? Take for instance the City creek—I mean during the irrigating season, if allowed to flow in its sandy bed would it not flow into the valley, and yet by taking up the water a short distance above the mouth where it debouches into the valley furnishes a very good stream for irrigation purposes?

A. Yes sir; there are a number of streams of that character but I don't recognize in them any parallelism to the Sweetwater. The Sweetwater is not a stream of that character.

Q. The Sweetwater is a stream that will flow for about eight months in the year would it not, down the valley in which the water is now impounded by the dam?

A. Yes sir.

Q. You would call that a river in California parlance would you not?

A. It is named the Sweetwater river. I suppose it by courtesy could be called a river.

Q. Is it not as much entitled to the name of river as many other streams known and designated as river?

A. It is a very respectable river in the winter time.

528 Q. Is not that true of most of the California rivers or streams that have their sources in the mountains?

A. I don't know of any of them in this county. The Sweetwater river is valueless as an irrigation supply without storage, and that is true to a great extent of other streams, but there are a number of streams in southern California which will supply more or less water for irrigation without storage.

Q. Now that is just the point I want to get at. It is a stream that will furnish water if it is stored by means of a dam or any other suitable way of impounding it.

A. Yes sir.

By Mr. WORKS—Redirect:

Q. You state in your cross-examination that the mesa lands in this section of country are particularly destructive to the pipes. Are Chula Vista and National ranch and the Otay mesa land?

A. Yes sir. Most of the lands in those places consist of mesa lands.

J. D. SCHUYLER, being duly sworn, testifies as follows:

By Mr. WORKS:

Q. If you want to make any correction in particular in this testimony that has been read, just make it.

A. In my testimony I stated that the loss by evaporation from the reservoir would be twenty to forty per cent. varying with the stage of the water. This was intended to mean the loss for two years and

not for one season alone, as the reservoir full must necessarily be regarded as a two years' supply, and it is never possible therefore to utilize more than one-half the capacity less the loss by evaporation.

Subsequent investigation has led me to believe that the aver-
529 age loss per annum is about fifteen per cent. of the whole, or thirty per cent. of the two years' supply must be allowed for as liable to be lost in evaporation. The reservoir has about 18,000-acre capacity; thirty per cent. of this deducted leaves 12,600 acre feet as available for two years, or 6,300 acre feet per annum. This would give 6,300 acres a supply sufficient to cover it one foot deep, or 326,000 gallons per acre.

Q. Have you made any calculation of the available quantity of water that may be stored in the catchment reservoir in gallons?

A. The total capacity of the reservoir?

Q. No, the available capacity of the reservoir for actual use, or the duty of the reservoir.

A. I have just given it in acre feet.

Q. If you will, just reduce it so we can get it in gallons, we may understand it better.

A. About 4,000,000,000 gallons.

Q. Is that the number of gallons that can be supplied per annum?

A. That is the number of gallons available after deducting the evaporation which we have found by experience to occur on an average for two years, and would be the supply available for two years; one-half that would be the supply for one year, about two billion gallons.

By Mr. SHAW—Cross-examination:

Q. Mr. Schuyler, do I understand you to say that the evaporation would be thirty per cent. for the two years?

A. For the two years, yes sir.

Q. And in all of your figures and estimates you make them upon the basis of two years' supply?

A. Yes sir, that is to say that the capacity of the reservoir of six billion gallons approximately, is available for two years only, and not for one year.

Q. For two years only—in other words if the reservoir is
530 filled it will last two years, furnishing two billion gallons of water each year.

A. Yes sir, if the reservoir is filled it will last two years.

Q. And in that you assume that there will be no catchment during those two years?

A. Well that would be the assumption, yes sir.

Q. You do not take into consideration then the winter rains which we usually have at all?

A. Well not in that computation I do not.

Q. Is it not a fact that there is always more or less water flows down the Sweetwater river into that reservoir every winter?

A. Yes sir, the minimum catchment of that reservoir has been very small, there have been two years of exceedingly small catch-

ment, one in which there was only about 350,000,000 gallons, during the whole season.

Q. What season was that?

A. I think that was 1895–'6. In 1893–'4 there was only 450,000,000 gallons.

Q. How was the amount of the catchment of those years estimated, how do you arrive at it?

A. By the gauge in the reservoir, and the known capacity at different levels.

Q. The rise in the surface of the water?

A. The rise in the surface of the lake, yes sir.

Q. From the beginning of the wet season to the close of it?

A. Yes sir.

Q. And it was estimated to be 350,000,000 gallons one year and 450,000,000 gallons the other?

A. Yes sir.

Q. How has it been other years?

A. The first year the catchment was about 2,300,000,000 gallons; the year following, 1888–'9 there was more than sufficient to fill the reservoir, and the total run-off was estimated at 8,200,000,000 gallons.

531 Q. That is the overflow was 8,200,000,000 gallons that year?

A. No, the total run-off of the stream, that is the total yield of the stream. It filled the reservoir full whatever it lacked of being full at the beginning of the season, and the remainder ran off, whatever it may have been. The record for 1889–'90 is imperfect, I do not know what — was, but for 1890–'91 the amount was 6,700,000,000 gallons; 1891–'2 the yield was 2,000,000,000 gallons; 1892–'3, 5,200,000,000 gallons; 1893–'4, as I have previously testified, 450,000,000 gallons; 1894–'5 over 23,000,000,000 gallons.

Q. How is that?

A. Somewhat over 23,000,000,000, that was that flood year, the volume was almost enough to fill the reservoir four times; 1895–'6, 350,000,000; 1896–'7, 2,200,000,000 gallons.

Q. Now in this estimate of 450,000,000 gallons in 1893–'4, and 350,000,000 gallons the other minimum year, you do not take into consideration the water that was drawn off from the reservoir during the wet season at all—or rather the dry season?

A. Oh yes, that is allowed for and these figures are the amount the stream yielded.

Q. Do you know what amount was drawn off during that time?

A. No I do not.

Q. Was it more or less than the amount the stream yielded?

A. It must have been much less.

Q. Do you know that to be a fact, or just surmise it to be less?

A. Well, I can state pretty confident that it is a fact, because the draught during the winter season when this water was flowing into the reservoir was quite small, and the addition to the reservoir was a very considerable quantity as compared with the draught.

Q. Did the gauge show an increase or reduction in the surface

of the water, the level of the water, at the end of the rainy
532 season?

A. I do not know of any season in which the gauge showed a decrease in the level of the water.

Q. How about evaporation in the winter season; that is seasons like 1893–'4, does evaporation go on?

A. Yes evaporation goes on.

Q. To what extent?

A. Well it was somewhat variable, it depends upon the weather wind and so forth.

Q. In a dry season like that was?

A. It is perhaps forty or fifty per cent. of what it is during the summer season.

Q. Assuming that no water was drawn off from the reservoir and that no loss occurred from evaporation, how many inches would the gauge indicate, the rise in the surface of the water by an increase of 350,000,000 gallons in that reservoir?

A. That would depend upon the stage of the reservoir when the water begun to flow in.

Q. Do you know the stage of the water at the beginning of the rainy season in 1893–'4?

A. I have not a memorandum of it with me, no. That is a matter of record at the reservoir. A record book is kept at the reservoir, and also at the office in National City.

Q. Have you any idea how much water was in the reservoir at the beginning of the season that year?

A. No I have not. That information can be readily supplied.

Q. Assuming that one-half of the capacity of the reservoir had been drawn off leaving one-half, then how many inches would 350,000,000 gallons raise the reservoir, and assuming too that there was no loss from evaporation or drawing off of water for use?

A. I should have to have a table of the capacity of the reservoir here to answer that question. I haven't it in my pocket.

Q. That was the dryest year was it not?

A. 1895–'6, yes.

533 Q. Would not the loss from evaporation alone during that rain- season or during that winter season amount to considerable more than 350,000,000 gallons of water?

A. No I do not think so, I have not figured on that.

Q. Now have you data yourself and have you observed the data which gives you these estimates of 350,000,000 and 450,000,000 gallons for that season?

A. No, I have not observed those myself. That is obtained from the records at the dam.

Q. Who keeps those records?

A. Mr. Fulton.

Q. You know nothing whatever about it yourself, except what you have learned from him and his records?

A. Well I knew considerable about it at the time I was employed by the company before leaving there.

Q. Were you employed there in 1893–'4?

A. No not at that time.
Q. Were you in 1895–'6?
A. No.
Q. So as a matter of fact you do not know anything about it of your own personal knowledge do you?
A. No, not of those years you speak of.
Q. And you do not know whether or not the evaporation during those seasons would cause a loss of three hundred and fifty to four hundred and fifty million gallons do you?
A. I do not know positively about it, I can simply give you my opinion.
Q. And you do not know how much water was drawn off during that wet season or rainy season do you, in 1893–'4 and 1895–'6?
A. No, I do not.
Q. And you do not know of your own knowledge whether or not the water in the reservoir was raised or lowered by the flow of water or supply of water from the river those years do you?
534 A. Not of my own knowledge, no sir.
Q. Mr. Schuyler, you designed and planned this entire system did you not?
A. Yes sir.
Q. You planned and laid out pipe line number one?
A. Yes.
Q. That is the main pipe, or 30-inch pipe is it?
A. Yes sir.
Q. And the distributing system connected therewith?
A. Yes sir.
Q. Lateral pipes and all?
A. Yes sir.
Q. Now in designing that system did you make no estimate or try in any way to ascertain how many acres of land that pipe line No. 1 would supply with water for irrigation purposes?
A. As I have stated in the testimony that has just been read I based that system upon the assumption of the duty of water which was considerably larger than experience has found to be the actual duty. The consumption of water in Chula Vista and at National City is larger than was supposed to be possible at the time the system was designed, and consequently the acreage for which that pipe was considered capable of supplying was doubtless very much greater than it can at present supply.
Q. Did you make a calculation or estimate of the number of acres that that pipe would supply for irrigation?
A. I do not remember about that.
Q. You laid out certain lateral pipes did you not in certain streets?
A. Yes sir.
Q. Did you make no estimate of the number of acres that you were covering with those lateral pipes?
A. Oh yes.
535 Q. Can you tell us how many acres?
A. Well the lateral system was designed to cover the acre-

age that they were laid in, that is the whole of Chula Vista was supplied with pipes.

Q. How many acres are there in Chula Vista which was supplied with those lateral pipes?

A. I do not remember, I think that the pipe system covers something over 4000 acres as designed at that time.

Q. That is the lateral pipe system?

A. The lateral pipe system.

Q. Then you also covered a part of the Sweetwater valley did you not?

A. Yes sir.

Q. How many acres there probably that this pipe line was designed to supply and do duty for?

A. The whole of the acreage in the valley proper below a certain level, I do not know how much the area is.

Q. At the 140-feet level?

A. The maps will show that, I have not that in mind at all.

Q. Did you not make any estimate of it at all?

A. Very likely.

Q. But you do not remember whether you did or not?

A. Yes sir, I think I estimated the whole of that acreage.

Q. You made an estimate of the whole of the acreage?

A. Yes sir, I think so.

Q. That this pipe line was designed to cover?

A. I think so.

Q. Have you no data which shows the acreage that you designed that it should cover?

A. My recollection is that it was designed to cover something over 13,000 acres.

Q, Something over 13,000 acres?

A. Yes sir.

536 Q. That 13,000 acres was not all the land it was intended and designed to irrigate, was it?

A. Well that was all the lands that the pipes were extended to, or that the pipes commanded, as I recollect.

Q. Did it not also run to National City?

A. Yes sir, that includes National City.

Q. The 13,000 acres includes National City?

A. Yes sir.

Q. You stated did you not to your employers that the system would irrigate 20,000 acres, and it was built with a view of irrigating an area of that extent?

A. Well that was a statement made in a paper I prepared for the American Society of Civil Engineers.

Q. You believed that paper that you wrote to the Society of American Civil Engineers to be correct and accurate did you not?

A. Yes sir.

Q. And so stated to them?

A. Yes sir.

Q. And you also made that statement under oath did you not,

that in your judgment it would irrigate 20,000 acres, that that system would?

A. That may be, I do not recollect that I am sure.

Q. Now Mr. Schuyler you say it will only irrigate about 6,300 acres do you not?

A. Well it is in that vicinity. It will appear from the experience had in actual irrigation, with the actual amount of water that the stream will furnish, that that is about the duty of the reservoir, the safe capacity.

Q. What do you consider the difference in the value of the plant, assuming that it would have irrigated 20,000 acres of land, as you supposed, believed and stated, and the value of the plant as you now state its capacity, of one-third of twenty thousand acres?

537 A. The value of the plant for what purpose?

Q. For irrigation purposes.

A. The value of the plant is what it cost, it surely is worth what it cost.

Q. Although it does not do but one-third of the duty that it was supposed it would do?

A. Yes sir.

Q. You still consider it worth what it cost notwithstanding that fact?

A. That depends a great deal upon the revenues that it can produce I presume, what the value of it is to its owners. As an irrigation work it is worth what it cost, although it could be reproduced for somewhat less than it cost. It was worth at the time what it cost. It may be said now to be worth—or it may be said that it can be reproduced for considerable less than what it cost because of the lessened values of material and labor and so forth since that time.

Q. Don't you consider that an irrigating plant that would irrigate 20,000 acres is more valuable than one which will only irrigate 6,000 acres?

A. Yes that may be.

Q. One that would irrigate but 6,000 acres would be worth just about one-third as much would it not?

A. On the basis of its income-producing capacity that would be the case no doubt. If it produced no income at all I suppose you would consider that it was of no value whatever.

Q. Now Mr. Schuyler, you say that that plant could have been duplicated last February or a year ago last February, I do not remember which,—when were these depositions taken Judge Works?

WITNESS: October two years ago, 1895.

Mr. WORKS: The date is February, 1895, I believe.

Q. You say the plant can be duplicated for about sixty-five

538 or seventy per cent. at that time of the original cost?

A. Yes sir.

Q. You say the plant could be duplicated for about sixty-five or seventy per cent. at that time of the original cost?

A. Yes sir.

Q. It could be duplicated now for considerable less than it could at that time could it not?

A. Probably not.

Q. Well what is your best judgment on that?

A. Well materials are going up, materials are higher now than they were two years ago.

Q. What could it be duplicated for now?

A. I have not estimated that.

Q. Now you claim that the average life of this pipe is about fifteen years do you not?

A. That seems to be about the indication, yes sir.

Q. How old is that pipe line now?

A. That part which was laid in the fall of 1887 is about ten years old now.

Q. What part was laid in the fall of 1887?

A. It was all laid in the fall of 1887 and the spring of 1888.

Q. So it is all about ten years old now?

A. It is all about ten years old now except the pipe No. 2 and whatever laterals have been laid since then. They are perhaps two years old.

Q. If called upon to construct a water system for that same section of the country, would you duplicate the present system or could you improve upon it at this time and build a system which would do the same duty in the way of furnishing water for domestic purposes and irrigation for considerable less money proportionately than what was paid for that at that time?

539 A. Well if I were called upon to design a system to supply that country to be laid out and populated as that country was supposed to be, as a choice suburb of a growing city that was supposed to be a very large one at some future day, I should probably provide it with the same very excellent facilities for water supply that that has provided for, and arrange everything about as it is now. If I could then have looked into the future however, at the time I laid out that system, and have foreseen what a very small town San Diego was continuing to be and the suburbs were continuing to do, that Chula Vista was not realizing the fond hopes that were had or indulged in, I probably should have given it some other sort of a system of supply, something cheaper.

Q. Conceive if you can that the topography of the country there is the same and the improvements are the same as they exist today, but the dam and the entire water system is blotted out, and you were called upon to supply a system for the present needs of that vicinity, for how much less could you construct it using the same pipe that the present system does, than the cost of developing the present system has been.

A. Indeed I do not know.

Q. Well give us your best judgment upon it Mr. Schuyler.

A. It would be necessary in any event to build a dam, an impounding reservoir dam. I do not know of any place where a dam could be more properly located or more cheaply constructed than right there where it is located. An irrigation system might be provided for such a tract of land as Chula Vista from the dam at somewhat less cost than an all-pipe pressure system. It would be possible

to construct a ditch, which at a certain elevation would command the whole of the tract of land and from that ditch water could be supplied for both irrigation and domestic purposes. Such a ditch as that was contemplated at the time the dam was constructed,
540 that is it was considered, but it was not adopted because Chula Vista was considered worthy of something more expensive and more efficient,—that is to say something that would give a supply of water, a domestic supply that would perhaps be more convenient, and give a better fire pressure and so forth, and possibly a better quality of water than such an open-ditch system would supply.

Q. Well, would the difference be $200,000?

A. I do not know.

Q. Would it be a hundred?

A. I could not begin to give you any figures on the difference of probable cost, without a calculation.

Q. It would be less?

A. Such a ditch system?

Q. Yes sir.

A. The cost of the ditch system would be somewhat less.

Q. But it would do the same duty exactly, those ditch systems exist elsewhere in this State do they not?

Mr. WORKS: Wait a moment, do you answer that it would do the same duty?

Q. In the way of irrigation.

A. Yes, in the way of irrigation it would, not in the way of fire protection.

Q. We are not talking about fire protection.

A. Or domestic use.

Mr. SHAW: Mr. Haines suggests that we pay city rates for fire protection and irrigation rates for irrigation.

Q. The Gage system and Riverside system is a ditch system is it not?

A. Yes sir—the Riverside system is a double system, they have ditches for irrigation and pipes for domestic supply.

Q. Now Mr. Schuyler, when you laid out and designed that system it was in contemplation of Chula Vista and National City
541 and Sweetwater and all of that section being densely populated was it not?

A. Yes sir, that was the expectation.

Q. And in contemplation of growth and prosperity that the country has not begun to reach?

A. That is right sir.

Q. And as you say, if you could have foreseen what you know now you would have constructed a much cheaper system which would have been equally efficient for that vicinity settled and improved as it is now?

A. Yes sir, I think I should have consided such a system as that. I may be mistaken in the idea that such a system would be prefer-

able in the way of cost. It would be a matter of careful survey and estimate to determine a question of that sort.

Q. In regard to evaporation, I understood you to say that taking the period of two years, or taking the water for one season, say the year 1897, the evaporation is fifteen per cent. of the entire quantity of water in the reservoir?

A. That is about what the average is, yes sir.

Q. So that the loss then for that year would be fifteen per cent. of six billion gallons?

A. It might be more, but the average of a number of seasons of supply as the reservoir is filled and drawn off, foots up about fifteen per cent. per year of the entire supply available.

Q. That is based upon the quantity of water there is in the reservoir is it not?

A. Yes, of course it must necessarily be based upon the quantity of water in the reservoir, but there may be times when the water in the reservoir is so low that that fifteen per cent. would not be as much as the entire evaporation of that year, but taking it one year with another the records show that the loss is about fifteen per cent. of the total value.

542 Q. If the loss of the reservoir filled with water the first year was fifteen per cent. of the six billion gallons, what would be the probable loss the second year, assuming that one-half the water had been drawn out?

A. That is just what I was trying to explain, that it is an average loss of fifteen per cent. The loss from a reservoir full might not be as much as fifteen per cent. The loss from a reservoir drawn down one-half or more may be considerable more than fifteen per cent., but the average of the entire volume which is available for two years is about thirty per cent., which would be about fifteen per cent. per annum.

Q. Do you mean to say Mr. Schuyler that the loss from evaporation with a reservoir filled is greater than with one-half of it drawn off, or less?

A. Well the probabilities are that the loss is greater of the total amount when the reservoir is full, because the surface is greater and the depth of loss applied to the larger surface gives a larger percentage of the total amount that would be lost.

Q. The percentage you think would be greater?

A. The percentage of what?

Q. If there were six billion gallons of water in the reservoir and the percentage of loss was fifteen per cent. for that year, the loss would be nine hundred million gallons, would it not?

A. Yes.

Q. Then if there were only three million gallons of water in the reservoir, one-half of it drawn out, the loss would be how much in the same ratio, 450,000,000 gallons would it not?

A. Upon that basis of reasoning, yes. The information that I have been trying to give you about the loss by evaporation is that taking season after season, the records of season after season, we

find so much loss by evaporation, and that is about thirty
543 per cent. of the reservoir full for two years.

Q. For two years?

A. As applied to two years.

By Mr. HAINES:

Q. What number of gallons does a miner's inch steady flow per annum make?

A. What number of gallons per hour?

Q. Yes sir.

A. Well a miner's inch will flow 12,960 gallons per day, and that multiplied by 365 days will give the amount per annum.

By Mr. SHAW:

Q. This plant was commenced in January 1887 and completed about when, what part of 1888?

A. It was completed I think about April 1888. It was commenced in the fall of 1886.

By Mr. HAINES:

Q. Didn't the water service begin as early as February 1888?

A. I think there were some of the pipes finished and water turned on perhaps as early as that, but the dam was not completed until April 1888 to the best of my recollection.

By Mr. WORKS:

Q. Why did you make your computation for two years instead of one Mr. Schuyler, as to the quantity of water lost by evaporation?

A. Because experience has shown that it is necessary to hold about fifty per cent. of the water in the reservoir over for the supply against dry seasons.

Q. Then the actual duty or capacity of the reservoir and the actual supply of water is about one-half of its full capacity?

A. That experience has shown to be the fact.

Q. Now in fixing the value of property of this kind Mr. Schuyler, in the answers you have made, what do you take as the basis
544 of valuation, the earning capacity of the system, or its cost?

A. In my reply to Mr. Shaw's question I assumed the basis of the capacity of the system for earning revenue.

Q. Now suppose we put it upon the basis of earning revenue and the law requires that such rates shall be fixed as will return the company a net revenue of six per cent. upon its investment, would it make any difference in that event whether they furnished 6000 acres of land or 12,000?

A. I should not think so, no, if the system cost a certain amount and the law required that a certain percentage would have to be returned on that amount, the value would be the same in either event.

Q. Now you have said that a cheaper system might have been constructed in this case for irrigation purposes. Would not an enclosed pipe have been necessary in order to supply National City?

A. Yes sir.

Q. Well do you suppose that that continuous pipe from the dam to National City could have been constructed and a ditch line also constructed for the supply of all the lands under the system for less money than you could put in the one pipe line to supply both?

A. Well it might have been possible. The domestic supply system would have required very much smaller pipes if the supply was confined to domestic purposes only, and the ditch system would have required less expense for renewal and maintenance.

Q. It is possible, but have you made any calculations to determine what would be the relative cost of the two systems, the double system and the single pipe-line system?

A. No I have not. It would have to be a combination of inverted syphons and ditch to cross the gulches any way, and it would involve necessarily a considerable quantity of pipe.

Q. Do you know that a ditch line could have been constructed there that would have supplied all these lands and supplied them properly and satisfactorily?

545 A. There would have been two ditch lines required, one on each side of the valley.

Q. Could you give any estimate of the size of the ditches that would have been necessary?

A. They would have had to have a capacity of 600 to 800 inches each, and would probably have been three or four feet wide and a couple feet deep.

Q. When you were considering the question of putting in those ditches what sort of ditches did you have under consideration?

A. Cement-lined ditches.

Q. If cement-lined ditches had been constructed you would have had to have lateral ditches throughout the system, if the company was going to distribute the water, would you not?

A. Yes sir.

Q. Now would that open-ditch system of supplying water for irrigation purposes alone be as satisfactory and efficient as that of enclosed pipes?

A. I have no doubt that it would for irrigation purposes alone.

Q. What would be the objection to it for furnishing a domestic supply of water?

A. The water would not be as well preserved from the sun, and there would be more opportunity for contamination.

Q. Could it be elevated into the houses with the same facilities?

A. No.

Mr. SHAW: This testimony we think is wholly immaterial, inasmuch as this board has no right to fix *water* for domestic *rates*.

Mr. HAINES: Oh yes it has.

Mr. SHAW: But that question is not involved here.

Mr. HAINES: It is not involved here for the reason that the company and the people are agreed, at what has been substantially the domestic rate from the beginning, which today is higher than in the city of San Diego.

546 Mr. SHAW: We do not desire to enter objections here if the understanding is that every thing can go in, and I believe that is the only way. I do not think this board will undertake to rule upon the testimony that is offered.

Mr. HAINES: I suppose we will have to govern ourselves a little reasonably upon it.

Mr. WORKS: I understand that all the rates are open here, but at the time the irrigation rates were changed the domestic rates were changed.

Mr. HAINES: Does the company ask now to raise the present domestic rate?

Mr. WORKS: No.

Mr. SHAW: We do not ask to have them lowered.

Mr. WORKS: I understand that the rates that were made were never accepted, they simply stand as the others do.

Mr. SHAW: I think it will be just as well to have it understood at this stage of the proceeding that we will not make any objections, and let it all go in.

Mr. WORKS: I am not making the proof or showing about the domestic rate, I am only showing that that would not be a desirable system, that is the only object of it.

Q. Have you attempted to make any estimate of the difference in cost of the two systems, the one with the ditch line and the other with the pipe line?

A. No I have not, I am just stating the possibility, that I should consider attempting to look for a cheaper system than we have at present—I should consider that possibility.

Q. You are not prepared to tell the board now what the difference in cost would be or whether there would be any difference?

A. No I am not.

By Mr. HAINES:

Q. Mr. Schuyler, there is now virtually a double system, one for supplying National City and one for supplying the lands
547 south of the Sweetwater river?

A. They are practically one system, they are connected and are practically one pipe system.

Q. But there are two lines leading to Chula Vista and National City?

A. Yes sir.

Q. One is called pipe line No. 1, and the other pipe line No. 2?

A. Yes sir.

Q. That would correspond to the two ditches Judge Works has been talking about?

A. Yes sir.

Q. One to supply National — and one to Chula Vista?

Mr. WORKS: No, not a ditch to National City.

Q. Are you acquainted with the Gage system?

A. Yes sir.

Q. That supplies water for irrigation and domestic use does it not?

A. I think so, yes sir.

Q. Isn't it true that water for domestic use is supplied by pipes leading to each consumer, with a filter in the line of the ditch where it is led off?

A. I do not know about that, I have not examined the Gage system very much. I simply know of the Gage canal and have been along it, but I never examined into the system.

Q. The San Diego flume furnishes domestic water to its consumers in the country does it not?

A. Yes sir.

Q. What method do they adopt?

A. They have pipes leading from their flume and laterals leading from their pipe at the end of their flume?

A. If you were to engineer this system anew would you put the main pipe line in the center of the valley as it is now located?

548 A. I think so. The principal object of putting the main pipe line in the valley was in the first place to get the shortest distance, and in the next place to get the easiness of the soil for excavation, and the soil which would be least apt to corrode the pipe. The sandy soil of bottoms is freer from injurious salts and alkalies than the mesa soil.

Q. Why was not the National City line put down into the bottom, pipe line number two?

A. It was more convenient to put it where it is. It was less expensive to put it where it is because it was intended for a high service and it was desirable to get the pipe as near the hydraulic grade line as possible.

Q. Would not that be a consideration applying to the main pipe?

A. Yes sir that was the consideration, and in order to get anywhere near the hydraulic grade line especially at Chula Vista, it required a very long detour and very much longer pipe. In the case of pipe line No. 2 the shortest line was in the direction of economy and in the pipe——

Q. Then you would not locate the line for supplying the lands south of Sweetwater river on the mesa or higher ground on the south side of the river, if you were to plan this system again?

A. I do not think I should make any changes in the pipe except perhaps to avoid one crossing of the stream. I should keep it in the bottom land where I originally had it.

Q. Is it not true that the floods of 1895–'6 tore out about 1500 feet of the 36-inch pipe through the gorge immediately below the dam?

A. Yes sir.

Q. And that it had to be put over to the north side of the canyon?

A. Yes sir.

Q. And the expense was entailed by the fact that it was

549 down in the bottom where the flood washed it out?

A. By the fact that the volume of water overflowing

the dam excavated the sides of the gorge from the bed rock and they in the water were used to bombard the pipe to pieces. With plain water the pipe would not have been injured, probably.

Q. But as an engineering problem it is wise to put it to one side?

A. With the experience that had been had it was desirable to put it higher, and in the bed rock, in a bed-rock trench.

By Mr. SHAW:

Q. You stated that the life of the pipe line was about fifteen years on an average. What is the life of the dam?

A. Well that is to be proven, I do not know, we hope it is going to be eternal as the hills. The prospects are that it will be.

Q. That it will last a hundred years or longer?

A. Yes,

Q. And you think as eternal as the hills around there to which it is anchored?

A. I think so, yes, unless there is some extraordinary convulsion of nature like an earthquake.

Q. When that dam was constructed you used, as compared with the means now used for constructing such dams, rather primitive machinery did you not, in hoisting the stone up, and everything of that kind?

A. Not specially primitive, they were appliances that are used today for small amounts of work.

Q. Was that a small amount of work?

A. Well it was as originally contemplated, it was a small amount of work. After we had got a portion of it finished the plans were enlarged and then it was not worth while to get machinery.

550 Q. You would not use horse-power today in hoisting the stone there would you?

A. I do not think I should, no.

Q. When were the plans changed or enlarged, how soon after commencing the undertaking?

A. I think about June or July, 1887.

Q. You commenced it in the fall of 1886?

A. Yes sir.

Q. What was the cost of the construction of the dam?

Mr. WORKS: It is given in that statement.

Mr. SHAW: It is given in this statement as $239,165.05.

WITNESS: I think that is correct.

Q. What could you today with the improved machinery now in use duplicate that dam for, what percentage of the original cost taking into consideration the cheapness of transportation, and labor and material?

A. Taking into consideration the fact that we have a railroad there to haul the materials to the dam?

Q. Yes.

A. I should say about seventy per cent.

Q. Not less than that you think?

A. Well I should not consider very much less than that.

Q. You are in the employ of the company are you not now?
A. No sir.
Q. How did you happen to come down here?
A. I was asked to come down.

Mr. SHAW: I suppose it can be understood and admitted that Mr. Schuyler is brought here as an expert for the company.

Mr. WORKS: We brought him here, yes sir, because he had knowledge of the original construction.

Q. Since completing it you have been in the employ of the company off and on ever since haven't you?
A. Well I have not been in their employ at all since 1895.

Mr. SHAW: I think that is all.

551 WITNESS: You want to know about the designing of that pipe for a certain number of acres; it was always considered in designing the system that additional pipes might be required, and provision was made at the dam for additional pipes if they were required. The entire design was a tentative one, to experiment with the needs of the country, and was supposed to be as near the requirements as we could arrive at them at that time.

Q. One other question Mr. Schuyler. You stated in raply to Judge Works that if the law compelled the consumer to pay rates which would produce six per cent. upon the cost of the construction of that plant, it was then worth what it cost—you so stated did you not?
A. Less the depreciation.
Q. Well, if the law compelled the consumers to pay twenty-four per cent. or pay rates which would produce twenty-four per cent. upon the cost of it, you would upon the same theory say it was worth four times its cost would you not, less the depreciation?
A. Well if they were able to protect twenty-four per cent. I should think it would be, if they were able to pay those rates.
Q. If they were able to pay those rates I should think it would be compulsory, and they would get it—in other words your estimate upon the value of this plant is upon a revenue basis, as to what you can get out of it?
A. My reply to your assumption as to values was that, yes, sir. The dam is as good today as it ever was. The reservoir may not be quite as good, it might have had some depreciation; the pipes have depreciated somewhat. Taking this depreciation from the original cost you have the true valuation at this time.

By Mr. WORKS:

Q. Mr. Schuyler, if the company were bound by the law to replace and make good those depreciations, the plant is just as valuable to the consumer as if the depreciation did not take place, is
552 it not?
A. Precisely.

By Mr. HAINES:

Q. Mr. Schuyler, you have answered as to the value of this sys-

tem upon the assumption put by Judge Works that the law gave a certain percentage, not less than six nor more than eighteen per cent. upon the cost of the system. To Mr. Shaw you answered as to value upon the basis of the system as a revenue producer. Upon what per cent. were you figuring in your answer to Mr. Shaw?

A. Well upon whatever percentage he would assume in his interrogation. I was simply satisfying his inquiry, I have not made any such computation.

Q. I want to ask you this question; you are acquainted with irrigation systems the country over, are you not?

A. Yes sir.

Q. You have had occasion to look into their values somewhat haven't you, to make estimates of their value?

A. I have had occasion to make estimates of their cost but not of their value.

Q. Haven't you been asked by would-be investors your opinion about the value of a system when constructed?

A. I do not know of a system in which I have been asked that.

Q. You must know every irrigation system west of the Rocky mountains don't you—more or less about them?

A. Well, I know a good many.

Q. You are acquainted with some in construction in Texas are you not?

A. Yes sir.

Q. And this side of that—well in your opinion, treating the subject as a matter of market value, and what a company desiring to go into this business would pay for a plant, how would the fact that this Sweetwater system instead of being competent to serve 20,000 acres can only serve 7,000 acres—how would that affect its
553 market value?

A. I think its market value would be more affected by the disposition of the people to pay for what they were getting than anything else.

Q. That is not an answer to the question. How would the fact that the system would serve only one-third as much land as it was designed to serve originally, affect its market value to a corporation or a body of persons who were seeking investments of this kind?

A. Well, I never have had occasion to advise anybody in regard to investing in water plants that had been already constructed.

Q. It was all in projected ones was it?

A. All my connection with investors had been with those who were about to construct new plants. There are very few people who like to invest in old plants like the Sweetwater system.

Q. Why?

A. Well, from the unpleasant conditions surrounding them very frequently which make them undesirable.

Q. Is one element of that reason that it serves only one-third as much land as it was constructed to serve, was proposed to serve when it was constructed?

A. The principal element is the fight that they would buy into.

Q. You think that would affect the market value do you?

A. I think it does.

Q. Do you think the fact that it only serves one-third as much as you originally estimated it would serve has no effect upon its market value?

A. Oh I do not know.

Q. Do you think the revenue of a system which will serve only six thousand odd acres could under any circumstances be expected to be as great as one that will serve twenty thousand acres?

554 A. The revenue ought to be proportioned to the amount of water that is available, or used.

Q. That is, the number of acres that it will serve?

A. The quantity of water that is supplied.

Q. Do you mean to say that the value is affected by the fact that the duty and service of the reservoir is less than it was expected to be when it was built?

A. Well I haven't thought of that very much. I suppose it would be.

By Mr. WORKS:

Q. Mr. Schuyler, is a larger system of this kind always more desirable than a small one as a revenue-maker, as compared with the cost and the cost of operating it?

A. I do not know.

Q. That is a part of the business that you do not know anything about isn't it Mr. Schuyler, as to the value in the way of making revenue, or the matters and things that would affect the market value of the property—you are not an investor in properties of this kind I presume?

A. Not at all—I never bought an irrigation plant.

Mr. SHAW: You prove the value by him though?

Mr. WORKS: Yes, based upon its cost.

By Mr. HAINES:

Q. Upon this theory in basing the value of the system upon what it cost, notwithstanding the fact that it only serves one-third as much land as it was constructed to serve or was proposed to serve when it was constructed, is based upon the theory that you raise the rates in proportion with the service and duty of the reservoir is less than it was expected to be, isn't it?

A. I do not know that the original expectation has anything to do with the value of the plant at all.

Q. The original rates were fixed upon that idea were they not?

555 A. Upon the idea of serving a larger quantity of land?

Q. Yes.

A. Yes sir, I have no doubt they were.

Q. You were consulted about them were you not?

A. No I was never consulted about the rates.

Q. Do you not know that they were fixed at $3.50 an acre upon the theory that they would serve more land?

A. That was my understanding.

Q. And now the theory is to make it worth as much as it cost by raising the price of water isn't it?

A. I presume so.

By Mr. SHAW:

Q. Mr. Schuyler, how many barrels of cement did you use in the construction of that dam?

(Witness takes pamphlet.)

Q. What is that, your report?

A. Yes sir.

Q. It is more correct I suppose as to the cement than it is as to the number of acres the system would irrigate?

A. Thank you. Perhaps my prognostication of the duty of that reservoir was about as correct as the prediction of the population of this town, at that time—17,562 barrels.

Q. What was cement worth at that time?

A. It cost us about $4.20 a barrel.

Q. Delivered there?

A. Yes sir.

Q. What is cement worth now per barrel?

A. I do not know what the latest quotations are, I think about $3.50 in town here.

Q. It cost then $4.20 and it would be $3.50 now, plus the cost of transportation?

A. Yes sir.

By Mr. WORKS:

Q. You were asked whether you figured upon the increase
556 of the rates by reason of the fact that a less number of acres can be supplied. I understand you to say that a less number of acres can be supplied for one reason because more water is required for each acre than you estimated?

A. Precisely—that is the entire cause of it.

Q. As a matter of fact then the rate should be increased correspondingly, if a larger quantity of water is used per acre?

A. We anticipated at that time that we would have to hold over fifty per cent. of the water each year in the reservoir, and the difference between the estimate of the duty of the reservoir and what is its actual duty now, is simply the difference in the quantity of water that the irrigators consume.

By Mr. HAINES:

Q. Do you know whether they have been consuming more or less during the last year or two than before?

A. I do not.

Q. When you said awhile ago that it was the disposition of the people that affected the value of the dam did you mean to refer to the fact that they resisted the raise of rates?

A. Yes.

Board adjourns until 9 o'clock tomorrow morning.

SATURDAY, *October 9th*, 1897.

Mr. WORKS: I would like to say to the board that I will be compelled to be in the Supreme Court on Monday and could not get back here until Tuesday at noon, and it has been discussed between counsel on the other side and myself as to whether it might not be better when we adjourn today to adjourn until Wednesday morning. I can get back here if the board prefers it in the afternoon on Tuesday, but I thought it might perhaps be more convenient to commence work in the morning. It is immaterial to me. Counsel on the other side thought if we adjourned over perhaps we had
557 better commence Wednesday morning, and that is entirely satisfactory to me if it is to the board.

The CHAIRMAN: Gentlemen, we are ready, whenever you are.

Mr. WORKS: I am ready. We will have Mr. Boal sworn.

JOHN E. BOAL, being duly sworn, testifies.

By Mr. WORKS:

Q. Mr. Boal, what official connection if any have you with the present San Diego Land and Town Company?

A. I am general manager.

Q. What position did you hold under the old San Diego Land and Town Company?

A. I was general manager, from January 1st, 1893.

Q. Up to what time?

A. Well I do not know that my official position with that old company has been dissolved. The company went into the hands of a receiver on the 5th of September, 1895, and I have been called upon to do very little if any business for the old San Diego Land and Town Company of Kansas.

Q. What connection did you have with the company under the receivership?

A. I was receiver's agent.

Q. What were the duties performed by you as receiver's agent as compared with the services rendered as general manager for the company?

A. They were very similar.

Q. Who had charge of the management of the company under the receiver here in National City?

A. I had charge of the company's business under the receiver.

Q. A statement has been produced in evidence here purporting to show the cost of maintenance of the Sweetwater dam, pipe
558 line and water-department expenses, and also showing the cost of the different parts of the system, the Sweetwater dam, the reservoir lands, the two pipe lines, and equipments. I wish you would tell the board from what source this statement is made up.

A. It is made up from the books of the company.

Mr. HAINES: I regret that we have not a copy for each member of the board. It is very hard for them to follow these figures. We

have one copy, but it is hard for them to grasp anything about this testimony without a copy.

Mr. WORKS: Here is one copy which is not complete. It is complete down to 1896. I think these had better be marked as exhibits and identified.

Q. I wish you would look at the paper I now hand you and state to the board what that paper is and what it shows?

A. This is a statement of the receipts for water rentals from the year 1888 down to and including 1897 to August 1st in the first column. In the second column it is a statement of the amounts paid by the city of National City in the way of water rent for the years 1893 to August 1st, 1897 inclusive. In the third column is a statement of the amounts received outside of National City for the years 1893 to August 1st, 1897 inclusive. These are actual receipts in cash as shown by our collection and cash book.

Mr. SHAW: Have you a copy of that, Judge?

Mr. WORKS: No I have not.

Mr. HAINES: It is included in this general statement.

Mr. WORKS: The total is included, but this is a seggregation of the amounts paid inside and outside of National City. We offer this in evidence, and will read it, it is short: (Reads.)

Water rents received from system, from consumers inside of National City, 1888, total receipts	.....	$3,991.30
1889,	.....	11,054.06
1890,	.....	12,679.05
1891,	.....	17,451.73
1892,	.....	18,907.10

559 Now down to that year the amounts are not seggregated as between National City and the outside, but from that on the statement shows the amount paid inside National City and those outside. (Reads.)

1893, the total is..... $22,255.86

of which National City pays $11,037.62 and the outside, Chula Vista, $11,218.20.

In 1894, total receipts $24,564.67, National City paid $10,715.29, and outside of National City $13,849.38.

In 1895, total receipts $23,839.03, and National City paid $9,342.04, and outside of National City $14,496.99.

In 1896, the total is $29,502.16, and National City paid $13,162.03, and outside of National City $16,340.13.

To August 1st 1897 the total is $13,196.18, and National City paid $6,442.77 and outside of National City $6,753.41.

The total receipts for all of the years were $177,441.95, and of that amount National City paid $50,699.79 and outside of National City, paid $62,658.11. Estimated to December 31st, 1897, total $9,425.85, and the proportionate amount is not estimated, making a total of $186,867.80.

The board will understand that those items are introduced because the other statement that we have introduced includes not only the amount that was paid by Chula Vista, which is in controversy here, but it includes also the whole of National City—in other words it includes the whole system. In some way the board will have to segregate I suppose the amount paid by National City, where their rates are fixed by the board of trustees, and the amount which is to be paid by Chula Vista in addition.

The CHAIRMAN: Did I understand you to say you wanted to mark these as exhibits?

Mr. WORKS: Yes sir.

The CHAIRMAN: The clerk is here now. You had better have a record of it.

560 Mr. WORKS: Mark that (indicating) Land and Town Company's Exhibit 1, and this one (the one just read from) Exhibit Two.

Q. Mr. Boal, does the statement or do either of the statements you have already submitted include the amount of money that has been received by the company for water rights?

A. They do not.

Q. The total of receipts that you have given in these statements as I understand covers simply the water rentals, the annual rentals?

A. Yes sir.

Q. Now I wish you would tell the board just what amount of money the company has received by the sale of water rights?

Q. Do you want this given by years?

A. Perhaps you had better give it by years if you have it.

A.—

1893	$8,410.00
1894	1,005.00
1895	2,850.00
1896	1,387.50

Those are the only amounts received by us.

Q. Are you able to state what portion of that was paid for water rights outside of National City, and what portion inside?

A. I am not, but I can say generally that most of this was re-ce-ed for water rights outside of National City.

Q. I wish you would add the amount received from water rights to the total receipts for the annual rates, and state to the board the total receipts by the company from all sources.

A. The total amount received from water rentals as per Exhibit One, after deducting the estimated amount to be received from August 1st to December 31st, 1897, is $177,441.95; the total amount received from water rights, $13,652.50; added to $177,441.95, gives us $191,094.45.

561 Q. Now perhaps you had better add your estimate for the balance of the year 1897 to that Mr. Boal, so we can get the total amount as actually shown, and as you had estimated it for the balance of the year.

A. The total amount including that estimate would be $200,520.30.

Q. Now do you know whether the company has paid back, or is obligated to pay back any of these amounts received for water rights?

A. We are obligated to pay some back.

Q. Just state what the facts are with reference to that?

A. We received a payment of $1500 for a water right on 15 acres in Chula Vista and a receipt was given at the time agreeing to pay back the amount if courts finally decided we had no right to collect this, and some time ago, two or three months ago, a suit was filed against us to compel us to pay back this amount, and Judge Ross ruled that we should pay it back.

Q. Are there any other receipts out of the same kind Mr. Boal, that obligate the water company to repay?

A. Yes there are a number of such receipts, aggregating I should say about half of the total amount received by us for water rights.

Q. I wish you would state to the board what rate per acre has been charged for irrigation that makes up these total amounts for each year for water rents?

A. The rate per acre for the most part has been $3.50 per acre outside of National City. Vegetable-growers and those having alfalfa and kindred crops were charged $5.00 an acre. Within the city of National City we have collected $4.00 an acre for irrigating ordinary crops, and as high as $7.00 an acre for irrigating alfalfa and vegetables, until July of this year when a rate of two cents a thousand gallons went into effect, and the minimum charge under that ordinance is $3.50, and the maximum $7.00 an acre.

562 Q. What do you mean now by a minimum and maximum charge, how is that regulated, by the quantity of water used, or how?

A. It is based upon the water used at two cents a thousand gallons, but we are not compelled to supply water to any irrigator for a less sum than $3.50 an acre, and either by a meter charge or by an estimate that is agreed to by both the water company and the water-taker, a rate may be fixed as high as $7.00 per acre.

Q. What quantity of water would have to be used per acre at two cents a thousand gallons in order to make the maximum rate of $7.00 per acre?

A. 350,000 gallons per acre per annum.

Q. Then if I understand the rate there is fixed upon a basis of $7.00 per acre where the whole 350,000 gallons is used?

A. Yes sir.

Q. Have you any means of knowing Mr. Boal what quantity of water generally speaking has been used for irrig-tion in Chula Vista?

A. We have set meters at various points, and I know generally what has been used, but the reading of the meter and the calculation as to the use of those different takers is under Mr. Savage's direct charge, and I am familiar with it only from hearsay.

Q. We will pass that then. Now under the head of general expenses, in the first column of this statement marked Exhibit One, I

wish you would explain to the board what is included under that general head?

A. We include materials, labor, expense of teams and matters of that sort in the care of the pipe system and dam system as well — care of the pipe line and dam.

Q. From what source are your books made up showing these expenditures?

A. The vouchers and pay-rolls are distributed monthly to this account.

563 Q. What is included under the head legal?

A. We include under that the salaries of our attorneys and in at least one year, the first part of 1897, we have also included some court expenses in addition.

Q. Now for those years where the amounts are set out, do you charge up against the water department of the company the whole of the salary of your attorneys or only a part of it?

A. Only a part.

Q. How has that been segregated, that is to say what amount has been charged to the water department and what to the land department?

A. One-half to each.

Q. Are you able to state to the board for which department the major portion of the services of attorneys are rendered?

A. The major part is rendered for the water department.

Q. Could you give the board some idea about what the comparison of labor is between the two?

A. I should say nine-tenths of the services are rendered to the water department.

Q. And yet in making up this statement you have only charged the one-half of it to the water department?

A. Yes sir.

Q. Now what is included under the head of office expenses?

A. Under the head of office expenses we have at the end of the year charged over from the general expenses of the company a lump sum as set out in this column.

Q. Upin what basis do you make that lump sum, how do you arrive at it?

A. Generally it might be arrived at in this way, general manager's salary, $600; assistant treasurer's salary $300; Boston office $750; office rents, postage, etc. $350.

Q. Does that column include all the office expenses, or do you divide that between the two departments as you do the legal expenses?

564 A. We divide it.

Q. What do you say with reference to whether you have made a fair and equitable division of it as between the two departments, in your judgment?

A. In my judgment it is a smaller proportion than could reasonably be charged to the water department.

Q. Well, with reference to the amount of work that is done for

the two departments in the office, which is the greater, the water department or the land department?

A. I should say that I, taking my salary, I do more business for the other departments, than I do in the water department.

Q. Now how is it with the engineer?

A. The engineer's services are almost entirely taken up with water business. He attends to some other matters but the main business is in the water departments.

Q. And with reference to the subordinate employees in the office, how is their work distributed as near as you can tell?

A. Take the stenographer and none of her work was included in the estimate I gave above, and yet a great deal of her time is taken up with water matters. The clerk in my office, none of his services have been charged in the estimate above. The assistant treasurer, but one-fourth of his services have been charged in that estimate.

Q. Are there any book-keepers or employees who devote all of their time to the water department?

A. No, half the services of the book-keeper who keeps the detailed books of the water department, we charged half of his salary to the water department and that is included in the water department expense in another column.

Q. Well now we come to that head of water department. I wish you would explain to the board what is included under that head?

A. We include half of Mr. Glover's salary—he is the book-
565 keeper—all of Mr. Savage's salary, a portion of stationery accounts, and such other items as come along from month to month as are clearly chargeable to that department, or to that account.

Q. Well are you able to say to the board that the distribution in the case of the water department, that the division of expenses between the two departments is a fair one to make?

A. I do say so.

Q. Now with reference to the taxes, does that column show the exact amount paid on account of the water department for taxes?

A. It does.

Q. How do you segregate the amount paid for the water department from that paid on account of the land department or upon its real estate?

A. We take the valuations of the various parts of the water department and of course from that it is easy to figure just what the taxes are.

Q. Do you mean the valuations placed upon them by the assessor?

A. I do.

Q. Well are these amounts that are stated here the correct amounts actually paid on account of the property of the water department?

A. They are.

Q. Coming to the interest, how is that column made up?

A. Well that was made up at the rate of an interest charge of seven per cent. on $150,000 in bonds, and later on $300,000 in bonds.

Q. Well did the company at that time have outstanding bonds upon which it was paying that amount of interest?

A. They had $500,000 outstanding for part of that time and part of it they had $300,000, I believe.

Q. How did it happen that you charged up to the water department interest upon $150,000 and later on $300,000?

566 A. Because the amount called for in the water department was so great; the amount of money called for was so great that we estimated that as being a proper division of the bond issue.

Q. Well, was the amount upon which this interest was charged up, actually expended, in your judgment, for the benefit of the water department?

A. It was.

Q. With reference to the column of insurance, does that show the correct amount that has been actually paid by the company for insurance?

A. It does.

Q. That covers simply the property under the water department does it?

A. Yes.

Q. For the last two years you have under the head of depreciation, the Sweetwater dam, pipe line No. 1, and pipe line No. 2: What percentage of depreciation did you take as the basis of those accounts?

A. My recollection is two per cent. on the dam and reservoir.

Mr. HAINES: That is annually is it?

WITNESS: Annually—and six per cent. annually upon the cost of the pipe lines.

Q. Well what is your judgment as to whether that is a fair percentage to take as the actual depreciation of the different property?

A. It seems to me fair.

Q. What has proved to be the case Mr. Boal within your own knowledge as to the depreciation of the pipe lines?

A. I know it is true that certain portions of our pipe line are now in such condition that they must be taken out and replaced within the next six months, and that other portions of our line have more frequent leaks than they have had in the past, showing a constant depreciation of the pipe lines.

567 Q. What pipe lines in particular have you found that it will be necessary to replace?

A. The pipe line on National avenue,—a portion of the pipe line on National avenue and a portion on Twenty-fourth street, National City.

Q. What is the size of the pipe on National avenue?

A. Eighteen-inch.

Q. Do you know how much of that needs replacing at the present time?

A. I think you can show that much better by Mr. Savage, as he has made measurements.

Q. When was this pipe line No. 2 constructed?

A. It was constructed in 1894 and 1895.

Q. What was the reason for the construction of that second pipe line?

A. That we might be able to supply more lands, and also to supply lands that were already under irrigation and were receiving an inadequate supply.

Q. Well is it necessary in your judgment in order to supply the consumers with water that that second pipe should be constructed?

A. It was necessary.

Q. Why was it necessary in order to reach additional lands, was it on account of the elevation, or what?

A. Mostly on account of elevation. It also reached into a territory that was not reached by the old pipe line.

Q. Has any estimate been made of the cost of your system inside of National City, the distributing system?

A. It has been made.

Q. Have you a statement of that that you can submit to the board?

A. The board will find it upon the statement already submitted, as Exhibit No. 1 I believe.

568 Q. What portion of it?

A. The cost of the system within National City is estimated $183,753.90.

Q. At the bottom of that statement?

A. Yes.

Q. How was that amount arrived at Mr. Boal?

A. It was arrived at in this way. The factory cost of all the pipe in the system was taken, and the cost of the system as laid was taken, showing that about 65 per cent. of the factory cost of the pipe was required to lay that pipe in the distribution system, and the factory cost of the different size pipes was increased by the 65 per cent., and it produced the results.

Q. Well, was that simply the proportionate share of the whole cost, shown to be within National City, on that basis?

A. The lines within National City were very carefully determined the length of the different-sized pipes within the city were carefully determined, so that the results reached were very accurate in my judgment.

Q. Could you give the board some idea of the quantity of land irrigated inside of National City, and the land irrigated outside in Chula Vista and different sections?

A. We could determine that by an examination of our books, but I have not the figures at hand. I believe Mr. Savage has been making some of those estimates.

Q. In making up this estimate of the cost of the plant within National City did you take into account any portion of the outside mains Mr. Boal?

A. I did not.

Q. That covers simply that portion of the distributing system inside of National City?

A. It does.

Mr. WORKS: You mak take the witness.

By Mr. HAINES—Cross-examination:

Q. How long have you been connected with this water
569 system Mr. Boal?

A. I entered the employ of the company in the early part of November, 1887. The water system was practically completed the following year. I have been with the company since.

Q. In your company's conveyances of water rights made to consumers of water, is it not true that you have conveyed a right to an acre foot per annum?

A. In the specific conveyances of water rights we have.

Q. In all those made since 1893 have you not?

A. Yes, that is my recollection.

Q. You made no specific or express conveyances of water rights prior to 1893?

A. We did not.

Q. And when you spoke about water rights prior to that time you distinguish between the form of conveying them in this, that since that time you have made them express?

A. I do not refer to water rights prior to 1893; we conveyed land without in any way referring to water, but water was furnished to that land when required, by the purchaser.

Q. And in the great majority of cases was it not furnished before the conveyances were made by the company?

A. In the majority of cases water was furnished to the land before a deed passed for the land—that is what you meant isn't it?

A. Yes, sir.

A. Most of our land was purchased on a contract, and the purchaser at once begun to use water.

Q. Has the company at any time discriminated between the water rights of people who bought land of it prior to 1893 and those who bought land of it since that time?

A. It has not, to my knowledge.

Q. You verified the complaint did you not in the action of Lanning against Osburn in the circuit court of the United States
570 for this district?

A. I suppose I did, I have not any distinct remembrance.

Mr. HAINES: Judge, I suppose it will be agreed that what is stated in this copy I have is correct?

Mr. WORKS: I suppose so—although I do not know what is in your copy, or what you have a copy of.

Mr. HAINES: If it is a copy, it is correct?

Mr. WORKS: Of course if it is a copy it must be correct.

Q. Do you recollect using this language contained in that complaint "That each of said defendants has by purchase or otherwise become the owner of a water right to a part of the water appropriated and stored by said company necessary to irrigate his tract of land"—do you recollect that language in that complaint?

A. I do not recollect it in that complaint, and yet I have no doubt it was in the complaint.

Q. Is that true as a matter of fact?

A. I believe so.

Mr. WORKS: It is true as a matter of law, anyway. Mr. Haines, upon that question if your object is to prove the water rights on the part of your people, whether they bought them or not, there is no necessity of taking up time upon that question, because we concede that you own water rights wherever the water has been voluntarily furnished to the lands of your clients, whether you bought it from the company or bought it from somebody else, or whether you paid for the water right, or did not.

Mr. HAINES: We will not waste any time then, we will take the concession.

Q. In making these conveyances in these express water rights since 1893 of an acre foot, what is meant by an acre foot?

A. A depth of water over the land of one foot, or reduced to gallons, about 326,000 per annum.

Q. For these water rights, what did the company charge
571 since 1893, so far as they were expressly conveyed, per acre?

A. They first charged $50 an acre, and later $100 per acre.

Q. And did you at the time of making these conveyances consider that an acre foot was the reasonable amount of water necessary to irrigate an acre?

A. We thought it was a reasonable amount, that it might not be required, but it was sufficient.

Q. Now the difference between the acre foot or 326,000 gallons and an allowance of 350,000 gallons per acre per annum is about 24,000 gallons is it not?

A. It is.

Q. And on five acres that would make 120,000 gallons would it not, the difference between the acre foot and 350,000 gallons allowance?

A. I believe so.

Q. Now would this 120,000 gallons be a reasonable estimate or cover upon a reasonable estimate the domestic uses for a family settled upon a five-acre tract?

A. I should think it would. I should think it would be sufficient.

Q. That would be how many barrels?

A. That would be 10,000 gallons a month.

Q. And you think that would cover the domestic needs of a family settled upon five acres?

A. I think it would.

Q. And if a family were settled upon ten acres it would be proportionately larger wouldn't it?

A. Not necessarily. Domestic use of course depends upon the number in the family, and the amount of domestic stock they keep, and the appliances they may have in their building for using water.

Q. Well on ten acres the difference between the acre foot and the 350,000 gallons per acre allowance would amount to about 240,000 gallons wouldn't it?

572 A. I believe so.

Q. Have you any consumers under this system who are using as much as 240,000 gallons for domestic and kindred uses on ten acres?

A. We have never measured that use separately from the irrigation water.

Q. What is your best judgment upon it?

A. It would be a mere guess upon my part.

Q. What would that be?

A. I should say that we have no one using that much for strictly domestic use outside of all irrigation for lawns and so forth.

Q. By domestic use do you include watering of animals and the like?

A. I would include the use of water in the dwelling and about the stable.

Q. And exclude all irrigation?

A. Yes.

Q. What by your statement submitted here as a basis for the board to proceed upon, were the cash receipts for rentals both domestic and irrigation, for the year 1896?

A. Cash receipts for the year 1896 were $29,502.16.

Q. Now how many acres of land were under irrigation under the system during the year 1896?

A. My recollection from figures furnished me by Mr. Savage is about 4,400 to 4,600 acres.

Q. What was the rate for irrigation during the year 1896?

A. As stated in my direct testimony, it ranged from $3.50 to $7.00 per acre.

Q. In 1896?

A. In the year 1896.

Q. Where did you get $7.00 an acre in the year 1896?

A. Within National City.

573 Q. Was there any ordinance to that effect in 1896?

A. There was. Let me look at these things.

Q. When was the ordinance passed of which you speak?

A. I will furnish you an ordinance in a minute. I can furnish an ordinance showing that to be the fact, but I have not got it present today. The ordinance in question would have been adopted in February, 1896.

Q. And went into effect when?

A. In July of the same year.

Q. How many acres were under irrigation in National City during that year 1896?

A. As stated in my direct testimony I have not those figures with me.

Q. What is your estimate?

A. I prefer not to make an estimate, because I have not attempted to inform myself.

Mr. WORKS: I suppose the exact number can be furnished can't it Mr. Boal?

WITNESS: The exact number can be furnished.

Mr. WORKS: Mr. Savage may give him the number, if that is satisfactory.

Mr. SAVAGE: In round numbers, 4,600 acres for the total.

Mr. HAINES: What were you informed?

WITNESS: He gave me the total of 4,600 acres for the whole.

Mr. HAINES: Now I am asking for the city.

WITNESS: 784⅛ acres.

Q. How much rental for the year 1896 at $7.00 an acre did you collect in National City?

A. It is impossible for me to tell without an examination of our books.

Q. Did any of the lands pay as high as $7.00 an acre in National City, outside of a few China gardens?

A. I think so.

574 Q. Did you have a graduated rate of $3.50 up to $7.00?

A. We did not.

Q. You had the full rate of $7.00 an acre in National City?

A. We did not.

Q. What was the rate in National City from July on?

A. The rate in National City was $4.00 an acre flat, based on two cents a thousand gallons. The consumer or the company had the right to place a meter and determine the quantity used, and we had the right to collect for the amount used at two cents a thousand gallons.

Q. Was $4.00 the minimum rate?

A. It was.

Q. How many consumers were charged more than $4.00 an acre in National City during the year 1896?

A. I can tell you from an examination of our books, but not now.

Q. According to your best recollection was it any considerable number?

A. The number of irrigators in National City is comparatively small to the whole. Most of our takers are domestic takers. Now I cannot tell the comparative number of the irrigators who took it at $7 and who took it at a less rate.

Q. Prior to July 1st 1896 what rate prevailed in National City?

A. My recollection is $3.50 an acre.

Q. Had it not been that from the very beginning of the system in National City?

A. It is my recollection it had.

Q. And it was $3.50 everywhere under the whole system from the beginning of the distribution of water until July 1st, 1896?

A. I think so.

Q. And remained $3.50 outside until the company sought
575 to raise the rate about January 1st, 1896?

A. Yes.

Q. Do you recollect any single instance where your company

charged irrigators of orchard land in National City after July 1st 1896 up to January 1st, 1897 at a greater rate than the $4.00 rate?

A. I do not, yet there may have been those who were charged more.

Q. What is your best belief about it?

A. My best belief is that those who had orchards without any other crops growing than the orchards were not charged the higher rate than $4.00.

Q And the higher rate was confined really to gardens, was it not?

A. And alfalfa.

Q. Mr. Boal, during the year 1896 the yield from rentals of all kinds amounting to $29,500—what proportion of that was yielded by domestic use?

A. I cannot tell you, we do not segregate the yield from domestic service and irrigation.

Q. Can't you make a computation from the number of acres of land under irrigation and arrive at it approximately?

A. I think I can get those figures from Mr. Savage.

Q. I cannot examine Mr. Savage and you at the same time, but cannot you give us your estimate?

A. No I cannot.

Q. Do you remember what my water rental is, on my place—you had cause to call it to your attention recently?

A. My recollection is that it was about $8.75 a quarter.

Mr. HAINES: No, about $18.75—$17.85 is the exact figure.

Mr. WORKS: Do you speak of the whole use Mr. Boal?

Mr. BOAL: No, for domestic use.

Q. No I mean the whole use?

A. I do not recall.

576 Mr. HAINES: I do not know as I have any of your statements. It is in fact $17.85.

WITNESS: Do you know the number of your service?

Mr. HAINES: Number 144 I think, but I may be mistaken.

WITNESS: What is your question please?

Q. In my case what is my total rate for water on ten acres of land, for irrigation and domestic use at $3.50 an acre?

A. It is $71.40 as shown by this book.

Q. How much of that is for irrigation?

A. You have ten acres I believe?

Q. And your rate is $3.50 an acre?

A. Yes sir.

Mr. WORKS: You do not mean $71 a quarter?

WITNESS: No, this is for the whole year. The irrigation rate would be $35.00.

Q. And the domestic rate how much?

A. $36.40.

Q. So that in that case the domestic rate on ten acres is a little higher than the irrigation rate?

A. It is so.

Q. Will you please turn to Colonel Rippey's service account.

A. I did not know this information would be asked for or I would

have brought an index with me. (Refers to book.) I have service No. 210 here which is accredited to C. H. Rippey.

Q. Do you know the number of acres?

A. Col. Rippey has five acres of land and has at times at least irrigated some additional land belonging to a neighbor of his, I suppose—has grown alfalfa upon it.

Q. How much is charged up to him on that?

A. The total amount charged is $46.50 per annum.

Q. And how much for irrigation?

A. Without knowing what is charged for the lands of his neighbor that he uses, it is difficult to say.

Q. Give his domestic rate?

A. This of course includes the domestic, but I cannot figure it.

577 Q. Can't you segregate it?

A. No I do not know how much he is charged for that additional land of his. His domestic rate might be $29 or it might be a little less than that. It would not be any more than $29.

Q. What should you say from your record of his rate, do his rates fully equal his irrigation rate?

A. They unquestionably exceed his irrigation rate.

Jobs

Q. Take the case of C. C. Jones, your number 212, what is the number of acres that he irrigates?

A. Two and one-half acres I believe.

Q. What would the irrigation rate be at $3.50 per acre?

A. $8.75.

Q. And the remainder—or how much is domestic, for domestic rates?

A. $18.75.

Q. In that case the domestic rate largely exceeds the irrigation rate does it not?

A. It does.

Q. That is owing to the fact that he has a very small tract of land, only two and a half acres?

A. It is.

Q. Can you turn to Mr. Gulick's?

A. I cannot, except by running over the book.

Q. Well in your judgment Mr. Boal does it hold good that on the average the consumers of water pay about as much on the average for domestic use as they do for irrigation?

A. I think this holds good, that on small tracts of land where the owner has a house and domestic animals he pays as much or more for domestic use as he does for irrigation.

On large tracts of land such as Mr. Gulick's and Mr. Howard's and some others the charge for irrigation would largely exceed the domestic.

Q. By a large tract you mean about a twenty-acre tract?

A. Yes sir.

578 Q. Is that about the average of the large tracts you speak of?

A. Yes sir.

Q. And what size are the small tracts for the most part?

A. Five acres.

Q. And some ten?

A. Some ten, more ten perhaps than five.

Q. Now are there more of the five-acre tracts than any others under the system?

A. I think not.

Q. What is the averaged sized tract, averaging them all together?

A. Ten acres.

Q. You think ten acres would be an average, so would you say that my case would be a fair average in comparing the domestic rate with the irrigation rate?

A. I think yours would be above the average.

Q. How do you mean?

A. I mean that you have a family perhaps above the average, you have a large house and I suppose appliances for using water that other irrigators have not, and you must have fully the maximum number of domestic animals that any of the irrigators have.

Q. There is no charge for a water-closet there is there?

A. I do not know what the items are that make up your domestic rate.

Q. Do you know of anything out of the ordinary uses made upon my tract of land?

A. I do not know what goes to make up your domestic rates.

Q. Is it not true that upon Chula Vista the large proportion of tracts do not exceed five acres?

A. As platted, that was true, but——

Q. Well as owned and used now.

A. As used I should say that ten acres would be nearer the
579 average. That of course is easily determined.

Q. Well roughly speaking Mr. Boal is it not true that the domestic uses and the irrigation uses about balance each other in the matter of yielding rates?

A. I do not know whether it is true or not, I cannot tell.

Q. It is true in this instance that we have called your attention to is it not?

A. It is true.

Q. And it is further true that domestic rates exceed irrigation rates in those cases?

A. It is true in the cases you have called up.

Q. Well now if it is true that the domestic rates yield as much as the irrigation rates at $3.50 an acre, can it also be assumed to be true that out of an allowance of 350,000 gallons per acre the consumer of water can get his irrigation water and his domestic use, is it not true that the average cost to people on that tract of Chula Vista and outside of National City would be about two cents a thousand gallons for both domestic and irrigation uses on the average?

A. It is in those cases that you called up. As I said awhile ago where the domestic use was full, but it certainly is not true as to the total amount of water that is used in Chula Vista.

Q. In making your last answer, do you take into account the fact that the company has a large amount of land under irrigation?

A. I do.

Q. And in this general average that you speak of do you raise the general average of rates by taking into account the lands the company irrigate?

A. I did not—did you mean to say the general average of the acreage that each irrigator uses?

Q. Yes.

A. I did not have that in mind when I gave my answer.

580 Q. How many acres is the company irrigating outside of National City?

A. I cannot tell you that offhand, I can refer to a statement Mr. Savage has and read it.

Q. Do so.

A. The number of acres within National City, irrigated by this company, is 117.

Q. I asked for the number of acres outside?

A. It is 1,352¾ acres.

Q. Does that include just the land covered by the trees?

A. Practically.

Q. Does it include any part of the lot which is in the street?

A. It does include a part.

Q. Any considerable part of lands in the street?

A. It includes to about ten feet outside of the sidewalk tree rows.

Q. And upon a ten-acre tract how much would be excluded?

A. On inside ten-acre lots there would be none excluded, we call them full ten acres. On a corner lot we would reduce it to about nine and a half acres.

Q. As Chula Vista is laid out, a ten-acre tract includes the street does it not?

A. It does.

Q. How many twenty-acre tracts can you recollect owned by persons other than the company, in Chula Vista?

A. Do you want the names or just the number?

Q. Yes, the names.

A. I recall Mr. Cook, Mr. Howard, Mr. Gulick, Mr. Howe, Mr. Vaughan,—I do not recollect any others, there may be others.

Q. How many above twenty?

A. I recall one.

Q. That is the Granger tract is it—the Kimball-Granger tract?

581 A. I recall two, the Granger tract and H. Copeland. There may be others, I do not recall them.

Q. How many fifteen-acre tracts do you recall?

A. I do not recall any positively, I think Mr. Berger has fifteen acres, but I am not sure of that.

Q. And Mr. Hughes?

A. Yes Mr. Hughes has fifteen acres.

Q. Now do you recall any other tracts above ten acres in all Chula Vista?

A. I do not recall them, but there may be some,—of course this is outside of the company's ownership.

Q. Are the company's lands generally speaking yielding as much for domestic water as the average of other lands?

A. They are not.

Q. Generally speaking are they yielding anything for domestic uses?

A. The company is charged for all of its domestic use, for the use of its corrals, at the same rate that any other consumer would pay, and for its officers in National City and elsewhere, paying domestic rates.

Q. But the greater portion of this 1352 acres has no people living upon it, that is true is it?

A. That is true. We have some six or seven houses on this land that are occupied by people who work for us, who pay the usual domestic rates.

Q. But the company's domestic rates outside of National City are confined to its corrals virtually, isn't that so?

A. Yes.

Q. Now excluding the company's lands which yield very little domestic rates according to your answer, and including all the other lands Mr. Boal, is it not your judgment that the domestic rates yield about as much as the irrigation rates, roughly speaking?

582 A. I think there would be very little difference on Chula Vista.

Q. How about the Sweetwater valley?

A. The irrigation rates would very largely exceed the domestic rates.

Q. Why would that be so?

A. Because the ownerships in the valley are much larger than they are in Chula Vista on an average, outside of the company.

Q. Whom have you in mind specially?

A. I have in mind the large orchards of Mr. Brown, Mr. Gooden, the Sunnyside orchards, the Sweetwater Company, and Mr. Horton.

Q. How is it about the people who live in Chollas valley under that extension pipe line through Chollas valley and the ex-mission?

A. In what respect.

Q. How does their contribution to domestic rates compare with their contribution to irrigation rates?

A. I have never examined.

Q. Isn't it a fact that their holdings are generally small?

A. Yes sir

Q. Is it the same relative average in your judgment between the domestic and irrigation rates applying there as apply in Chula Vista?

A. I am inclined to think so.

Q. Now then under that state of facts in your judgment do the people on Chula Vista and on the ex-mission pay an average of two cents a thousand gallons for domestic and irrigation uses?

A. I do not know about that, I should be inclined to think that where the domestic use is as I said -while ago equal to the cases you

have brought up, that they pay two cents a thousand gallons for the two uses. Of course that is a rate for domestic water that was never heard of.

Q. I am simply trying to get at what this water costs.

583 A. Yes.

Q. Then for every 350,000 gallons that those people take, they would be virtually paying $7.00 for, for both uses?

A. Yes.

Q. Now for the year 1896, according to the statement laid before the board, the company claims a right does it not to $79,411.86 for maintenance of the Sweetwater dam, pipe line and water department expenses?

A. The amount named by you includes an interest charge which is I understand to be excluded from this matter today.

Q. Why was it put in this statement?

A. This statement is a copy of the one submitted to the city of National City.

Q. Why should it be in there and not here?

A. There there is no rate fixed as I understand it, no interest rate upon the investment fixed as due the company.

Q. Why was it submitted to the board here, or to the council of National City?

A. In National City we considered it a direct outlay on our part to be compensated for, that must be cared for, if we continued to keep our system going. Outside of National City as I understand it we are entitled to an interest charge upon the value of the system at any rate, and upon that view of the case that might be excluded here.

Q. If that were excluded, then here it would leave $58411.86 as what the company claims it would be entitled to, if it followed this statement?

A. I have not made the deduction, but I assume you are right.

Q. Will you make the deduction then?

A. The amount should be $58,411.86.

Q. That is now exclusive of net revenue?

A. That is exclusive of net revenue.

Q. And upon this statement what does the company claim

584 it would be entitled to at the minimum rate of net revenue of six per cent., will you state what that would amount to?

A. It depends upon the value of the system, upon what it is taken at. Taking it upon the cost of the system, as it should be, six per cent. upon the cost of the syetem would be $61,561.37.

Q. And estimating the revenue that the board should allow for the whole system, including the expenses for repairs, operation and maintenance, and six per cent. upon the basis of the cost would make how much in the aggregate?

A. The sum of those two amounts, $119,973.23.

Q. In round numbers about $120,000?

A. Yes sir.

Q. Do you concur with Mr. Schuyler that the safe duty of the system is two billion gallons a year?

A. I think that is a safe duty. That would insure to the water-consumers an adequate supply every year as far as our figures go. By an agreement on the part of water-consumers to use a less amount at extraordinary times, we might reasonably increase the duty of the system, but if the consumers were adhering to a full supply in every year, no matter how dry it is, then the duty of the system must be kept down.

Q. To the two billion gallons?

A. To about that figure.

Q. Well, if the annual amount of water furnished would average two billion gallons and the income demanded for the whole would be $120,000 how much would that be per thousand gallons?

A. That would be six cents.

Q. That would be then the result of fixing rates upon the basis of this statement wouldn't it, taking 1896 as an average?

A. Yes, excluding interest charges.

Q. And if you included interest it would make it higher would it not?

A. It would.

585 Q. If you included inter-st, how much would it make it?

A. It would not make it higher, for the reason that if we got interest, if we included that much interest in our statement, interest on bonds, we would have to reduce the value upon which the six per cent. would be included, consequently it would not increase it.

Q. Was that the theory upon which you have been urging the case in the United States circuit court?

A. That is my recollection of it.

Q. Isn't it true that you were demanding this interest as operating expenses there?

A. It was.

Q. And besides that six per cent. upon the cost of the plant?

A. I think not. I have not those calculations with me, apparently.

Mr. WORKS: The complaint will show what we claimed in reference to that.

Q. Do you recollect whether or not in your complaint in that case, verified by you for the company, you were claiming that the interest charge should be included in the operating expenses?

A. I do not recall.

Q. Do you recollect this language "That the annual expense of operating and keeping in repair the said reservoir and water system of the said company and furnishing said consumers with water is, including the interest on its bonds and excluding the natural and necessary depreciation upon its system, $33,034.99"—do you recall that language? That was the year 1894.

A. The language sounds very familiar to me, I have no doubt it is in it.

Q. Then did this further language occur in this complaint: "That in order to pay the said company the amount of its annual expenses and income of six per cent. upon the amount actually invested in

said water system up to the first day of January, 1896, it is
586 necessary that such rates for water sold and consumed be so fixed as to realize to said company the sum of $119,791.66 "—do you recollect whether that was stated?

A. I believe those figures were stated, but that does not necessarily mean that we figured interest twice in the matter.

Q. Well you concede that it ought not to be done?

A. It ought not to be done.

Q. Now then Mr. Boal have you a list of the domestic rates with you, those claimed by the company outside of the city of National City?

Mr. WORKS: The new rates Mr. Haines, or the old ones?

Mr. HAINES: They are substantially the same I believe.

Q. The rates promulgated by the company to take effect January 1st, 1896—you have a statement in your hand have you?

A. I have such statement, yes sir.

Q. Now if the rentals at $3.50 an acre and at the same domestic rate now prevailing, cost the consumer at an average of two cents per thousand gallons for both purposes, if he paid six cents per thousand gallons the rates would be three times as high as they are now, wouldn't they?

A. Yes sir.

Q. And in that case will you turn to the rates here and state what would be the domestic rate for a dwelling-house per annum occupied by not more than four persons?

A. It would be one dollar per month.

Q. That is what is is now, but if the rates were three times as high it would be $3.00 per month wouldn't it—if it were six cents per thousand gallons instead of two cents per thousand gallons the rates would be three times as high, wouldn't they?

A. Not necessarily. In your question you have averaged all the water used at two cents a thousand gallons.

Q. Yes sir.

A. Now upon the new rate you cannot estimate all the
587 water used, you cannot say that the domestic rate would be three times as high, and then the irrigation rate three times as high in all cases.

Q. How is that Mr. Boal?

A. In your case your domestic rate exceeds your irrigation rate, and if we were to multiply that by three, and your irrigation rate by three, the result would be greater than it would to multiply your present total by three, wouldn't it?

Q. I think not, Mr. Boal.

A. No I guess not.

Q. Take my aggregate rate of $71.50 and multiply that by three, and state to me what my correct rate would be?

A. Let us see about this.

Q. If rates were fixed so as to yield $120,000, it would treble the rate all around wouldn't it, for domestic purposes as well as for irrigation?

A. Well that has not been our plan at all. That would not necessarily follow.

Q. I am not asking your plan.

A. It would not follow Judge.

Q. I am asking whether from the statement you submit to this board to act upon it is not true that excluding interest you would have to have in round numbers $120,000 a year, and that that would treble the present rates, domestic and irrigation?

A. No.

Q. Why not?

A. Because the irrigation rates might be increased, and not the domestic rates.

Q. Would it yield $120,000 then?

A. It might be increased to a point where it would? Take the land and town company's large ownership, they pay no domestic rates, now it would be hardly fair to increase you three times and not increase us more than three times, because we use a much
588 larger proportion of water per acre than you do.

Q. Well is not that true now as a matter of fact, that it is hardly fair to the consumers of water for domestic uses to pay so much, and the company only pay for irrigation on this large tract of land?

A. It is true in one sense, and that is why we would not trouble the domestic rates, but we would increase the irrigation rates, so that we should pay a larger proportion.

Q. Then suppose you did not increase the domestic rates and you put it all upon irrigation rates, about what would the irrigation rate amount to, to yield $120,000?

A. It would be very high.

Q. About how high?

A. It would be six and a half to seven cents a thousand gallons perhaps.

Q. No, we had six cents for the average use, wouldn't it be twelve cents?

A. It would be higher, I do not know the exact figures.

Q. It would be all out of reason wouldn't it?

A. Yes sir.

Q. Do you still think this is a safe basis to go upon here, this statement which you lay before the board upon which to fix the rates?

A. It is the only statement we have to furnish. We must furnish what we have.

Q. Was your counsel correct in saying that your company wanted six per cent. upon the whole cost of the system?

Mr. WORKS: Counsel never said that Mr. Haines, we never demanded any such amount. Do you mean in the filing of the complaint?

Mr. HAINES: No no, before the board here. I understood Judge Works to state to the board that he claimed the right upon the part of the company to six per cent. minimum rate upon the cost of the system, and not upon the present value.

589 Mr. WORKS: That is what the law provides. You are asking the board to fix the rate, and not us, we have never asked any such amount.

Mr. HAINES: Why did you put this statement in here, to fix it at six per cent.?

Mr. WORKS: No, I claim that when the board fixes it they must fix it as the law provides. This company does not believe that the consumers could stand any such amount as that, but when they fix it they must fix it as the law provides.

Mr. HAINES: You think that the board is bound under the law to give six per cent. on upwards of a million dollars upon this whole system?

Mr. WORKS: Yes, sir, that is the law undoubtedly. It is just the way with the flume company, they came here and asked to have the rates fixed, and they fixed it at $120 an inch, but the company has never charged that amount.

Mr. SHAW: I wish you would have them send $60 down to me, because they demanded $120 from me, last April.

Mr. WORKS: They haven't done it in many cases.

Q. Is it not true Mr. Boal that you have laid this statement as Exhibit One before the board for the purpose of claiming to the board that you are entitled to six per cent. net revenue upon the whole cost of this system?

A. Not necessarily. The statement is the figures we had to furnish, and was made upon request.

Q. Do you disagree with the position of your counsel here that the law entitles you to six per cent. net revenue upon a million dollars.

A. I have no opinion to express upon the law.

Q. At whose instance did you furnish these figures to the board?

A. I prepared these figures *these figures* at the request of our counsel, and furnished you a copy at your request, before I did our counsel.

590 Q. Do you think the board ought to take that statement just as it reads and give you all the operating expenses of $58,411.86 and net interest or revenue of $61,561.00?

A. You are asking me to tell the board what they shall do?

Q. Yes, what do you urge upon the board what do you claim the board ought to do, as the manager of this company?

A. I claim that we should be given a reasonable water rate.

Q. Under all the circumstances?

A. Under all the circumstances.

Q. And do you think the board would be giving a reasonable water rate to literally follow this statement?

A. I think a rate of six cents a thousand gallons would be higher than the water-consumers could pay.

Q. Well is what the board ought to do here what the consumers can afford to pay?

A. I think not.

Q. What is the measure then that you want them to follow here?

A. The board surely are controlled in the matter by the law of the case. We cannot bring in a statement here that is different from what the figures show. The board must take that statement.

Q. But you can make such claim as you see fit upon these figures can't you?

A. We have made no claim as yet, at least I have not.

Q. When counsel speaks for the company, we usually think the company makes it. Do you disagree, upon what Judge Works said to the board?

A. Counsel as I understand made claims that we ought not and had not asked for $120,000 a year income from our system.

Q. Now Mr. Boal, let us see if we cannot eliminate some of these things and get something out of this statement that will be of some help to the board. Your first item of expense is under the heading of "General," what is that for the year 1896?

A. That is $5000.71.

591 Q. What does that cover?

A. That covers as I stated in direct testimony, the salaries or wages of pipe-repairers, the material used in repairing pipe, cost of teams used by those repairers, and the keep of those teams.

Q. Anything on the dam?

A. And the expenses on the dam.

Q. What sort of expenses were those?

A. We maintain a keeper there, and we clean the reservoir from year to year.

Q. Does this item of $5000.71 also include any replacements of pipe during the year 1896?

A. Yes sir, so far as any have been made. There have been short sections here and there.

Q. So that that $5000 is really all the actual outlay of the company for repairs and operation of the system outside of its management?

A. Outside of superintendence, office management, equipment and so forth.

Q. What do you mean by equipment?

A. There is an investment of course necessary in tools, teams, stables, and matters of that sort.

Q. Well the use of the teams is included in the $5000.

A. The expense of feeding and shoeing those horses and repairs to wagons would be charged into that.

Q. Now coming to the next item of $1200 legal expenses, is that paid by way of salary?

A. It is.

Q. And one-half the salary of the attorneys for the San Diego Land and Town Company is charged here?

A. Yes sir.

Q. Now will you give in detail what services were rendered by attorneys as near as you can, to this water system, during the

592 year 1896?

A. In caring for the legal questions that arose, and the maintenance of rates, and so forth.

Q. Were any of those expenses for attorneys' fees incurred in protecting the system against any outsiders who were not consumers?

A. Not that I recall; there may have been cases where we consulted them upon matters that seemed to affect our system.

Q. Well what would be the reasonable amount to be paid for all the services rendered by counsel, to the water system, outside of any question arising between the company and its consumers?

A. A very small amount.

Q. Virtually insignificant wouldn't it be?

A. Yes sir.

Q. So that the whole of this $1200 is what is charged up for counsel fees in the litigation between the company and its consumers?

A. Yes sir.

Q. And when did that litigation arise—about January 1st, 1896, didn't it, so far as the people outside of National City are concerned?

A. I believe so.

Q. And that litigation arose out of the fact that the company raised the rate for irrigation from $3.50 to $7.00 on the first of January 1896 didn't it?

A. Yes sir.

Q. And then the whole expense for counsel fees has been in that litigation virtually?

A. Practically, yes sir.

Q. And you claim that your consumers ought to pay your attorneys' fees for that, do you?

A. Yes sir.

593 Q. They have resisted this raising of rates have they?

A. They have.

Q. They have claimed that it was not legal, and that question is in the courts is it not—still pending in the United States court?

A. I do not know about that. I understood certain decisions had been rendered which indicated at least if not directly stated that our raise in rates was legal.

Q. That is, so far as the decision of Judge Ross of the United States circuit court is concerned, he gave an opinion to that effect?

A. So I understood it.

Q. There has been no final decision in that case, no final decree has there?

A. I do not know about that.

Q. Mr. Boal, upon what theory do you claim that the San Diego Land and Town Company ought to charge up to the consumers their attorneys' fees for litigating with them over the question of raising rates?

A. It seems to me that when the company is compelled to resort to the courts to maintain its unquestioned rights, that the people who cause that resort to the courts should pay for it. Now if I am correct in stating that Judge Ross has ruled that we had the right to raise that rate to $7.00 an acre, and the consumers have made it necessary for us to litigate that question ever since, and at the end find that we were right, it seems to me that they should pay the cost of it.

Q. Suppose Judge Ross should turn out to be wrong upon appeal, what then about these attorneys' fees?

A. Well that is a supposition which I do not know that we ought to be called upon to answer just now.

Q. It cannot be verified until we hear the final decision upon the question can it?

594 A. No, but the decisions that have already been rendered it seems to me are what we should depend upon, from our side at least.

Q. Suppose that the consumers should succeed in this controversy, would you think the company ought to pay their attorneys' fees?

A. I think we have been making law by this litigation.

Q. Well, ought not the company to pay for its own laws?

A. The law is for the benefit of both perhaps—I think it is.

Q. Well if the consumer should have to recognize your right to charge for water rights finally, it would be a great benefit to the company, wouldn't it?

A. That is a question, I am not prepared to say whether it would or not.

Q. Mr. Boal, the main controversy between the company and the consumers in Judge Ross's court was over the raise of rates from $3.50 to $7.00 for irrigation, was it not?

A. Yes, that raise as you know was based upon the charge per thousand gallons.

Q. But wasn't it a flat rate of $7 as promulgated to take effect January 1st, 1896?

A. Yes, with the provision that the consumer had the right to call for a meter and determine the quantity used and pay for it at two cents a thousand gallons.

Q. And is it not also within your knowledge that upon the same question Judge Torrance held just the opposite from what Judge Ross did?

A. That is my recollection.

Q. And now why should not we charge you our attorney fees as consumers, for that decision?

A. That might seem fair.

595 Q. How would it do to offset one against the other, and exclude this $1200 from the consideration of the board?

A. Well I am not ready to admit that that would be a proper exchange.

Q. We will take up the next item then of office expenses. First I want to ask you Mr. Boal, how do you come to segregate office expenses from these water-department expenses?

A. For the reason that water-department expense does not include all the reasonable office expenses. It is a mere question of bookkeeping.

Q. Are you keeping your accounts in this way, "Office expense," and "Water-department expense" as separate headings in your books?

A. We do not. The amount is charged over into office expense as shown by this statement, that is included under general expense

on our books, and as I stated in direct testimony it is an amount charged over at the end of the year, as we now keep our books.

Q. You formerly kept your accounts or at least rendered statements in this wise did you not, "Expenses, maintenance of pipe line and maintenance of Sweetwater dam" in the reports made to the board of directors by the officers of the company?

A. We did.

Q. Now will you state again what items are included in the $2000 office expense for 1896?

A. It is a lump sum made up from an estimate of about this kind; general manager's salary, $600. assistant treasurer, $300, Boston office, $750.00, office rents, postage, etc. $350.00.

Q. You assign what portion of your salary to the water department?

A. One-fourth.

Q. And what part of the assistant treasurer's salary, what part of Mr. Hornbeck's salary to the water department?

A. One-fifth.

596 Q. I thought I understood you the other day Mr. Boal—correct me if I am wrong—to say that $1100 of this was charged for the Boston office, am I correct in that statement?

A. Yes, it is a mere matter of division as to where that should be placed, whether we shall charge office rents and certain other items that unquestionably go into the entire system, or whether we shall place it all in Boston. I am satisfied to accept either of those—call that $1100 from Boston and $900 from this office—although there are other items that are not included.

Q. Assuming that this $1100 is for the Boston office, will you state what service the Boston office rendered to this water system in 1896 by way of repairs or operation or management?

A. In the matter of repairs they rendered no service. In the matter of management——

Q. Operation next?

A. Operation directly, nothing. In the matter of management, we at this end of course take our orders from them.

Q. So that is maintained for the purpose of giving instructions to the people on the ground here?

A. Yes, and in generally looking after the administration of affairs.

Q. Well what occasion is there for having that supervision at Boston instead of right here?

A. That is a matter of detail in the company.

Q. Well this company is organized in Maine is it not?

A. It is.

Q. At present?

A. It is.

Q. Has it any office in Bangor, or any other seaport in Maine?

A. At Kittery.

Q. What are the office expenses at Kittery?

597 A. I haven't had a statement yet.

Q. Mr. Boal, how can you justify a charge to the consum-

ers under this system of $1100 or any other sum for Boston office expenses?

A. Well unquestionably the Boston office as the company is at present operated at least, is a necessary part of the administration of the company's affairs generally, including the water department, and I have charged up a very small part of the Boston offices expense as shown by the statement.

Q. Must not the Boston office get all its knowledge from your reports from this end?

A. And from such personal observation as they make while they are here.

Q. Do you charge their traveling expenses from Boston here to the water department, any of them?

A. As I said, it was a lump sum that was transferred as a reasonable charge, into that department. The Boston office expenses as shown by the report you handed me, is something like $26,000.

Q. Is not that rather far away to manage a local water system?

A. Yes sir, excepting that policy may be determined anywhere and executed somewhere else.

Q. Now coming to the water-department expense for the year 1896, $3302.02, what salaries are there in that?

A. Half the salary of the book-keeper Mr. Glover.

Q. How much is that?

A. $41.66.

Q. How much a year?

A. That would be $500.

Q. How much for the engineer?

A. All of his salary.

Q. How much is that?

A. $1800.

598 Q. That would leave something like $1000 for miscellaneous matters?

A. Yes.

Q. Now what is covered in that?

A. Well generally such items as books, for the water department, receipts, blanks and a great many other things that come up from month to month, and are distributed on the vouchers.

Q. Are any traveling expenses incurred in the litigation at Los Angeles included?

A. There may be some, not a great deal.

Q. Traveling expenses of attorneys coming from Los Angeles here?

A. My recollection is that we have never vouchered to Works and Works traveling expenses, we may have some, but it was very insignificient.

Q. Is it true or is it not true that the expenses of yourself and Mr. Savage in the attendance upon court at Los Angeles are charged into this miscellaneous fund?

A. I think it is true.

Q. Do you know about how much?

A. No, it is very small, it does not cost us very much to go there and back.

Q. The management then of this plant exclusive of Mr. Savage's salary, outside of the actual repairing and operating of the system, would be how much?

A. I have no doubt you refer to that column marked office expense.

Q. I wanted the aggregate of office expense and water-department expense, and taking Mr. Savage's salary out.

A. You mean to say you first want the sum of the $2000 and the $3303.02, and from that you want deducted the $1800?

Q. Mr. Savage's salary.

A. $3503.02.

Q. Now that is virtually all office expense, $3502.02, that
599 is the salary of those employed in offices, and the miscellaneous expenses?

A. Yes.

Q. Mr. Savage's work is outside work?

A. Yes.

Q. The taxes you say for the year 1896 were ascertained by dividing the total amount of taxes, or apportioning from the total amount of taxes, the tax upon the valuation of the water system?

A. It is reached in this way. Where property that belongs to the water department was included with other property belonging to the company and the total of the taxes shown in one item, the valuation of the water-department taxes was taken out and the tax determined by the rate, and to that was added any other tax that was assessed directly to the dam or pipe line, as the case might be.

Q. Can you tell what was the aggregate amount of taxes on the whole of the company's property including the railway, for the year 1896?

A. No, our taxes generally amount to about $18,000 a year, from eighteen to twenty thousand.

Q. That is including all the property of the San Diego Land and Town Company?

A. Yes.

Q. And then this $3,444.20 would indicate about the relative assessed value of the water system to the whole?

A. It might, of course the rates may be different in different sections. San Diego property for instance pays a greater proportion of taxes.

Q. Mr. Boal, upon what theory does the company demand from consumers that they should pay the taxes upon the system, and also interest upon the cost of the system?

A. Upon the theory that the tax is a direct charge into the operations of a system, and that the interest was supposed to be a net interest.

600 Q. That is upon a construction of the law that taxes are included in either the repairing or operating or the management of the system?

A. In operating the system, it is one of our necessary expenses.

Q. And that the law when it speaks about six per cent. net annual revenue means exclusive of taxes, or over and above taxes?

A. So far as my opinion of it goes that is what I suppose.

Q. Now coming to the item of depreciation on the Sweetwater dam, the amount for 1896 is how much?

A. It is $5874.21.

Q. Does the company claim the consumers ought to make up that item in rates?

A. We claim that the depreciation upon the plant is a constant factor in its operation, that it is something that cannot be replaced or made good in the way of repairs from year to year in all cases, and that the time will come when the company will be called upon to make very heavy replacements, and that it must accumulate a fund during the life of the system with which to make good that system. That is generally our theory as to depreciation.

Q. And to effect that, the claim is made upon this statement is it not by the company that there ought to be two per cent. upon the cost of the dam?

A. Yes.

Q. And will you give the amount of depreciation claimed upon pipe line No. 1 for the year 1896?

A. It is $53,337.97.

Q. That is at what rate per annum?

A. That is at the rate of six per cent. per annum upon the cost.

Q. And give the depreciation on pipe line No. 2 for the year 1896?

601 A. $4,244.26.

Q. That is at the rate of six per cent. upon the cost of pipe line No. 2?

A. It is.

Q. I understand you to claim that the repairs made from year to year do not make good the depreciation?

A. They do not.

Q. Do you mean to say you do not claim so?

A. I claim the repairs from year to year do not make good the depreciation.

Q. You claim the lifetime of a pipe is about fifteen or sixteen years, as Mr. Schuyler does?

A. Yes sir, at six per cent. it would be 16⅔ years.

Q. This pipe line No. 1 has been down how long now?

A. It has been down nine and a half years about.

Q. It will be ten years by the first of 1898?

A. Yes sir.

Q. A good part of it was put in during the summer or fall of 1887 was it not?

A. I believe so, I was not here then.

Q. It had largely been put in prior to the time you came?

A. Yes, the large mains had, the smaller mains had not.

Q. Then in approximately ten years that pipe has depreciated sixty per cent.?

A. Yes sir.

Q. Is it worth as much now as it was when it was put in?

A. It is not.

Q. How much less?

A. To a company who must replace it it is probably worth forty or fifty per cent. of what it was; to the people who use it it is worth the same.

Q. It is indispensable to them, is it not?

602 A. Yes, and they are not the ones called upon to replace it when it finally goes to pieces.

Q. Is that your theory Mr. Boal?

A. That is my theory.

Q. Why do you ask that they should make up depreciations from year to year?

A. For the purpose of accumulating a fund with which we can replace it.

Q. If they furnish the funds, would not they be replacing it?

A. They are in one sense, but they are not called upon to pay out all the money after they furnish this depreciation fund.

Q. Mr. Boal, is it not true that in the report made, in the eighth annual report of the board of directors of the San Diego Land and Town Company to the stockholders, dated December 31st, 1894, there was shown a balance to the credit of the water department of $49,699.28?

A. It is so stated in this report.

Q. Has that fund been preserved in any way?

A. That fund never existed actually. During all of these years the item of legal expense, office expense, taxes, insurance, and depreciation was not figured in in the reports of the company, all of this excepting depreciation, which was not placed upon the books, all those other items went into the general expense of the company. In other words, the water department was never charged in those reports with the proper amounts to cover taxes, insurance, office expenses and legal expenses.

Q. What provision is there that you know of for the protection and preservation of the sinking fund for replacing a pipe system when it is worn out?

A. I know of no legal arrangement for the future.

Q. The San Diego Land and Town Company of Kansas was sold out gun, lock, stock and barrel, wasn't it?

A. It was.

603 Q. And its assets are all gone?

A. They are.

Q. Now what is there to prevent any such catastrophe happening to this company and any trust fund of this kind that might be accumulated?

A. As far as the water-consumers are concerned they have not suffered by the transfer of the assets of the company from Kansas to Maine.

Q. That is hardly the answer. What is there for future security for any such sinking fund for replacing the system?

A. Unless the general assets of the company are security for that—— .

Q. They would have to trust to the company, in other words?

A. Yes.

Q. Mr. Boal, in your judgment what proportion of the capacity of this system for furnishing water for domestic and irrigation purposes is now in use?

A. I have not at hand the figures to show the quantity of water that is used from the system. I believe there are estimates that have been furnished by engineers that from two to two and a half billions of gallons is the capacity of our system. Now if 6000 acres use that, that is the capacity in acres, or if 8000 acres use it, that is the capacity in acres. It depends entirely upon the amount of water used per acre.

Q. Well what is your observation as to the use of water within the last two years, has the community been using less or more water for the same purposes?

A. They have been using less. In other words, by a proper charge per thousand gallons, I believe the duty in acres can be largely increased as people learn to use it more economically.

Q. And to what maximum extent do you think it could be increased, the acreage under irrigation, and have the support
604 of people living on the land?

A. It might possibly reach from seven to nine thousand acres.

Q. Well if it should reach 8000 acres, supposing that the proportionate amount for domestic use is no larger than it is now, what would you estimate the revenue to be per annum at the old rate of $3.50 for irrigation?

A. In the first place it would never reach that at the old basis, because as long as water is furnished by the acre and there is no incentive to use less quantity, it will never increase over 6000 acres.

Q. Well supposing you do apply all checks upon waste of water but whatever protection you use in that way leave the rate at $3.50 per acre, what based upon the rates for 1896, would be the receipts for rentals from the whole system at its maximum capacity in use?

A. I do not know that I could answer that any better than to say in 1896 we irrigated 4600 acres, and if we irrigated 8000 acres—if we irrigated 3400 acres additional—if the domestic use was proportionate, the income would be proportionate.

Q. That is, if the capacity of the system for domestic use and irrigation use covered the wants of people living on 8000 acres, the increase in revenue based upon the receipts for 1896 would be as 8000 is to 4600?

A. Yes sir.

Q. Well what is the probability Mr. Boal with respect to the proportionate increase of domestic rates and domestic service? Is it likely to increase rather than decrease proportionately to the irrigation?

A. I have no doubt that proper adjustment of water-rate questions, that the proportion will be about the same.

Q. Does the company propose to maintain its large acreage of lands under irrigation and cultivation as an orchard owned by the
605 company and not sell them and settle people upon them?

A. I understand the policy of the company will be to hold those orchards until they come in bearing, and then sell them upon their merits. In other words we are risking our money in order to determine whether of not the growing of fruit is a proper matter. If we determine in the affirmative we think we can sell our lands upon the basis of what they will produce.

Q. The question of whether people can make a living upon those lands is still problematical is it?

A. The question of how good a living is problematical, as in all undeveloped businesses.

Q. If the company should succeed in settling people upon these lands it would largely increase the proportion of domestic rates would it not?

A. It might; we have people in Chula Vista who own twenty acres, and have very little domestic use.

Q. If there were some people settled upon this 1400 or 1500 acres of land they would yield more domestic rates than when there were no people upon it?

A. They would.

Q. The original policy of the company was to require all purchasers to put up a residence costing at least $2000 wasn't it?

A. It was.

Q. On each five acres?

A. I believe so.

Q. And the tendency of that was to settle up the country wasn't it?

A. Yes, at that time, but if that policy had been continued we would not have sold any land probably, later.

Q. Well what did these lands sell at originally?

A. My recollection is that the first lands on Chula Vista after water was assured, sold at $150 an acre.

Q. How many tracts of five acres?

606 A. I do not recollect just the number, there might have been four, there were some sold at that rate, six perhaps.

Q. And after the $150 rate per acre what then prevailed?

A. My recollection is that $300 an acre was the next.

Q. What was the next rise?

A. $350 was the rate that was in effect when I came here I believe, and it afterwards went to a higher rate, but I think there were no lands sold.

Q. How high did the rates go?

A. $450 I think, with a $50 rebate for improvements—$400.

Q. Was the rate $350 for a time?

A. For a time, yes sir.

Q. Were some lands sold at that rate?

A. That is my recollection.

Q. And it went up to $450 with a $50 rebate for cash?

A. For improvement, as I recollect it.

Q. The company was trying to have the lands improved at that time, that was the policy of the company?

A. That is my recollection, yes.

Q. That is what dictated the requirement of having a $2000 dwelling-house?

A. I think so.

Q. Now Mr. Boal, in the sale of all those lands is it not true that every purchaser was assured by the company that he would get the water with his land?

A. It was true.

Q. This statement which I have in my hand which reads "San Diego,—southern California—compliments of the San Diego Land and Town Company" was prepared by Mr. Dwight Braman, wasn't it?

A. That is his name in there, yes—I doubt if he prepared it.

Q. Was he at the time the president of the San Diego Land and Town Company of Kansas?

A. I think so.

607 Q. The company has distributed this?

A. It has.

Q. And is still distributing it?

A. Yes sir.

Q. On page 4 I see this statement: "As is the case with all the land of the San Diego Land and Town Company the water is sold with the land and becomes perpetually attached to it." That is true isn't it Mr. Boal?

A. As I understand it that is true. We have no right to deny any one the use of water on that land if he pays the rates.

Q. But when it was sold with the land was not the price of the land raised because the water went with it?

A. Yes, just as any other improvement would raise the price of any lands lying near by; the railroad was there and that caused an advance in price, the streets were graded——

Q. But the water was an important element was it not?

A. It was.

Q. In the prices of the land?

A. It was.

Q. Has the company ever made any discrimination in the rates between the land it itself owns and irrigates from its system as to irrigating rates, and the lands which it sold?

A. Not that I know of.

Q. The present San Diego Land and Town Company of Maine bought the water system and the lands of the company all in a lump didn't it at public sale held at the land and town company's office June 14th, 1897?

A. Yes it was bought by a committee representing some sort of a body.

Q. That committee represented the present San Diego Land and Town Company of Maine?

A. Yes.

Q. And where that company is irrigating its own land now
608 owning the water system and the land, it charges itself up with the same rate as it does the people who have bought lands of it?

A. It does.

Q. And also the same rates that are charged to people to whom the company voluntarily furnished water where they did not buy the land from the company?

A. Yes.

Q. And in all these figures contained in this Exhibit One, the rates charged up to the San Diego Land and Town Company for its own irrigated lands is $3.50 per acre is it not?

A. Within the city of National City it is charged the same rate other land is charged; while the rate was $4.00 there it was charged $4.00; now that the rate is raised it is charged in the same proportion.

Q. But outside of National City this statement includes only $3.50 per acre for the company's lands?

A. That is all.

Q. Does the company make any discrimination at all between the claim for rates from people to whom it has given these express water rights since 1893 and those to whom it sold land at that time?

A. It makes no distinction.

Q. Now I show you a water-right contract given by the company to Messrs. Ira and H. B. Howe, and I quote this language from it—you recollect that the company gave such a contract?

A. I recollect it did.

Q. "This agreement made and entered into this 18th day of April, 1893, by and between the San Diego Land and Town Company, a corporation, existing under and by virtue of the laws of the State of Kansas, as the owner of certain water and water rights and a system for the delivery of water to consumers in the county of San Diego, State of California, of the first part, and I. M. and H. B.
609 Howe of Burton, county of Richardson, State of Nebraska, party of the second part, witnesseth: That the party of the first part agrees to and it does hereby sell to the party of the second part a water right to one acre foot of water per acre per annum for each and every acre of the real estate hereinafter described, to be delivered through the pipes and flumes of the party of the first part at a point on E street between Tenth and Second avenues for the sum of $500 payable as follows: Cash upon delivery of this contract duly executed"—I omit a proviso and read on—"Said water right is sold for the use and to be appurtenant to the following-described real estate now owned by the party of the second part in the county of San Diego, State of California, to wit: The east half of lots numbered 15 and 16 quarter section numbered 149 as subdivided by the San Diego Land and Town Company of Chula Vista"—and so forth—This then Mr. Boal was a grant of a water right for ten acres of land for which Mr. Howe paid $500?

A. Yes sir.

Q. Do you claim the right to charge Mr. Howe any rate of interest on the cost of the system for the use of water for the irrigation of land to which this water right has been annexed by this conveyance?

A. The water-right contract does not show that he paid for anything except the right to take the water from our system, and that he acquired no other right than that by this water-right contract.

Q. What was this $500 charged for then?

A. It was a part compensation for doing what was necessary to get water—to bring water to his land I should say.

Q. That is it was on account of construction of the water system, is that it?

A. That would be one construction of it, another would be that it was in the nature of a bonus.

610 Q. A bonus for what?

A. For the development of water.

Q. A sort of public-spirited donation to the land and town company.

A. Not necessarily. As it proves, it is a charge that we were not authorized to make by the laws.

Q. Does the company take that position today, that it was a charge it was not authorized to make?

A. That is the latest decision we have, as I understand it.

Q. Is the company acting upon that decision?

A. Practically, yes. We are supplying new lands without exacting a payment at this time.

Q. Do you exact a contract from the purchaser of land, or from any outside land that demands water, to pay for a water right conditionally?

A. We do exact a contract.

Q. Have you a copy of one of those clauses of contract?

A. I have not. I can say generally what it contains.

Q. You may just state generally what it does contain?

A. It was a contract in the same form as the one that was handed me a few minutes ago, in which we add the provision that the landowner may either pay the principal charge of $100 an acre, or an interest charge thereon of six per cent. per annum at his option, beginning when the courts of competent jurisdiction decide that it is a proper charge for us to make, otherwise there is nothing collected of him.

Q. That $100 an acre that is conditionally contracted for, is in addition to annual rates?

A. Yes sir.

Q. Now why does the company exact such a contract from all persons who want to put new land under irrigation, whether they bought of the company or not?

611 A. Well upon the theory that the present law as expounded by Judge Ross should not be finally upheld, I suppose.

Q. Does the company desire the law to be upheld as he has expounded it, or does it desire the contrary?

A. We are making no contest, we are not prosecuting his decision any further, the Chula Vista decision.

Q. That has not reached a final decree yet—you do not mean to say that that appeal is to be dismissed?

A. I think I had better be informed by our counsel just what we mean to do about that matter before I answer.

Mr. WORKS: Yes, you had better not get into the legal department Mr. Boal.

Q. Mr. Boal isn't it true that the company claims that it of right ought to have the right to charge new lands for water right?

A. We have made that claim in two suits.

Q. Are you not practically asserting it by compelling people to make these contracts before you give them water?

A. We are saving to ourselves the right to collect that, in case we have that right.

Q. And you would not save that right unless you thought it was desirable would you?

A. Unless we thought it was desirable, no.

Q. And is it not true that your company has adopted the policy that they will not furnish any water to any new land the owners of which will not enter into this additional water-right contract unless they are compelled to do so by a suit of mandamus?

A. Yes sir.

Q. You take that position to protect the company do you not?

A. Yes sir.

Q. And to protect the company in its claim that it ought to have $100 an acre for any new water rights, that is true, is it not?

Q. Well not necessarily.

612 Q. Well as manager of the company you would not ask it unless you thought the company ought to have it would you?

A. I should feel that the company might under certain circumstances be entitled to it.

Q. What are those circumstances?

A. The question of rates not returning to us a compensation beyond the mere maintenance.

Q. Is not the only circumstance which would affect the company in exacting an absolute payment of $100 for a water right the question of whether the courts would permit it or not?

A. I suppose that is so.

Q. And that you still regard as unsettled, or you would not be making these conditional contracts?

A. Yes sir.

Pending the examination of Mr. Boal, the board adjourns until two o'clock this afternoon.

Afternoon session.

JOHN E. BOAL, recalled.

By Mr. HAINES:

Q. Mr. Boal examine this paper marked Petitioners' Exhibit B, and state whether or not that is the form of water-right contract

which has been and is now in use by the company for sale of water rights to people who do not buy land of the company?

A. It is the form of contract that has been in use and is still used, with such additional provisions as were mentioned this morning.

Q. Is the copy I now hand you the form of your additional provision?

A. This is the form of the additional provision, as far as I can tell.

613 Q. Will you attach that where it is inserted?

A. There is where it goes in. (Attached to paper.)

Q. Do you use a similar form of contract adapted to the case where you sell your own lands to purchasers?

A. We have used the land-sale contract in which the provisions of this water-right contract are inserted I believe, at least they are in the main.

Q. In your land sales at the present time do you insert this conditional provision?

A. We have made no sales since that question was passed upon by courts, that I remember, and I would be governed by the advice of counsel as to what form of contract to use.

Q. Have you a copy of the rates promulgated by your company, to take effect January 1st, 1896, for various purposes?

A. I have.

Mr. HAINES: We will offer that in evidence as Petitioners' Exhibit C.

(The paper is marked Petitioners' Exhibit C.)

Mr. WORKS: Is that for the petitioners, or the protestants, Mr. Haines.

Mr. HAINES: This might be marked Petitioners' and Protestants' Exhibit.

Mr. WORKS: You are working together then to that extent?

Mr. HAINES: So far as the domestic rates are concerned there is no controversy—and this, by the way, ought to be marked Protestants' Exhibit B instead of Petitioners' Exhibit B. (Referring to former exhibit.)

Q. Is this which I show you a copy of the rules and regulations promulgated by the San Diego Land and Town Company and adhered to by the present company?

A. The rules are the ones promulgated by the company, and are adhered to so far as they do not conflict with the later interpretations of our right by the court.

Mr. HAINES: I will offer this in evidence as Petitioners' and
614 Protestants' Exhibit D.

Q. Mr. Boal, in your examination in the case of The San Diego Land and Town Company against The City of National City, this occurred. You were asked, by Judge Gibson, I believe, the following. "I now hand you two advertisements of the company, one dated November 6th, 1889, signed by William G. Dickinson, general man-

ager, National City, California, and the other dated May 14th, 1892, signed by John E. Boal, acting general manager San Diego Land and Town Company, National City, California, and ask you if they were not and are not standing advertisements of the company respecting the lands and rates at which water would be supplied such lands as it has offered and is offering for sale," and your answer here appears to be recorded "They are samples of our advertising. I do not want to be understood as saying that we followed this sample in every case, that varied to suit the requirements of the case, but they do state the rates at which water would be furnished up to the present year"—do you remember what year this testimony was taken?

A. My recollection is that it was 1895.

Q. You recollect so testifying?

A. I would not, except that it is down there.

Q. What is that?

A. I would not, except that it is there. I have no doubt that that is my testimony.

Q. And this further question "They are both the same are they not in reading, they are both worded the same, are they not?" And the answer from you is "They are, so far as I can tell from a hasty examination, I believe they are exactly alike." Do you recollect anything about that?

A. I do not.

Q. Have you any doubt about having testified to that Mr. Boal?

A. I have not.

Q. Do you know what the character of those Exhibits C and D were?

615 A. I do not.

Q. Signed by Mr. Dickinson, general manager, and by yourself, Mr. Boal, respectively?

A. We issued a good deal of advertising matter in those days and it would be very hard to identify them without seeing them.

Q. These are probably on file with the clerk of the United States circuit court are they not, these Exhibits C and D referred to in this testimony?

A. I think so.

Q. I will ask you Mr. Boal, whether to the best of your recollection they were not similar to the one I now hand you, so far as the fourth page is concerned?

A. I have no recollection of what they were. They might have been this or they might have been something else. This is one of our advertisements that we have kept standing. Whether this is the one I referred to in there or not I cannot say.

Q. To aid you in identifying them, do you recollect Mr. Gibson saying "I offer these in evidence as Defendants' Exhibits C and D. All we offer of these exhibits are the advertisements referred to on the fourth or back page of each"—does that help you to answer the question as to whether these exhibits to which your attention was called in that examination were similar to these?

A. It does not refresh my memory as to whether they were or

not, but it would rather indicate to my mind that they might have been these.

Q. Now that fourth page to which your attention was called was a standing advertisement of the company was it?

A. It was.

Q. Was that in use as early as November 6th, 1889, in your judgment and recollection, after having called your attention to this testimony?

616 A. I have no positive knowledge on the subject as to whether it was or not. I am prepared to say that I think it might have been.

Q. There were similar ones in use were there not from as early as 1888?

A. I cannot say. This one is dated January 1st, 1891.

Mr. HAINES: Yes, I call your attention to this in order to establish the earlier ones which were introduced in evidence I understand in that case. I will read this in evidence. "Extraordinary inducements offered to manufacturers. A large tract of land is reserved in the center of National City, terminus A. T. & S. F. R. R, to be donated to locating manufactor-s. Railroad switches throughout entire tract, very accessible to deep-water wharves, transcontinental rate point, rail connections with all wharves and railroads in San Diego and National City. Ample power, cheap water, low rents and reasonable prices for dwelling lots. Property of the San Diego Land and Town Company, who are also owners of Chula Vista. Five thousand acres subdivided into five-acre tracts, to be sold only to those who will improve the same at once, improvements to consist of a house to cost not less than $2000. Entire tract covered with water mains, filled with pure mountain water from the Sweetwater reservoir, capacity six billion gallons. National City and Otay railway in operation through center of property with frequent trains to San Diego and National City. More than fifty modern houses completed and twenty-five more under contract to be completed within six months. Low prices for the first few who locate. Twenty thousand acres irrigated. Fruit and farm land immediately adjacent to San Diego and National City. Abundance of water in pipes at $3.50 per acre per year. Choice locations in Sweetwater valley at $250. per acre, less a rebate of $50 per acre for each acre planted to citrus trees and maintained for one year. For information, terms and prices, inquire of William G. Dickinson, general manager, San Diego Land and Town Company, National City, California." Mr. Dickinson was the manager up to what time Mr. Boal?

617 A. Up to about the 14th day of July, 1891.

Q. When did you assume the duties of general manager of this corporation as it was preceded by the present one did you say this morning?

A. My recollection is my appointment as general manager dated from January 1st, 1893. I was acting general manager from about July 14th, 1891 until I was appointed general manager.

Q. Whose duty was it to make up the general balance-sheet of

assets and liabilities of the San Diego Land and Town Company from year to year?

A. As published in these reports?

Q. Yes sir, as published in these reports.

A. The treasurer of the company in Boston.

Q. The data for those were derived from what source?

A. From the operating books of the company in California, and from such other general books as kept in their eastern office.

Q. Did you have anything to do with making the appraisement or valuation of the various parcels and items of property of the company from year to year?

A. The appraisements were made in this office, in the National City office.

Q. Under your supervision?

A. Yes.

Q. When was there an appraisement made under your supervision last in the National City office?

A. I am unable to state. My recollection is that the appraisement was not changed in the last report that was published from what it was before.

Q. Have you made any appraisement since that time?

A. I have not.

Q. The last report that is published is this one of December 31st, 1894, which I hold in my hands?

A. I believe so.

618 Q. How much change was made in the property owned by the company as listed in this report of December 31st, 1894, up to June 14th, 1897, in a general way?

A. The actual property was not changed to any great extent, but the values of course have changed.

Q. Now since December 31st, 1894, how much land has the company planted under its system?

A. I am inclined to think Mr. Savage has a report of that that I might use if you don't mind.

Q. Yes, just use it.

A. 605¼ acres.

Q. What is the proportion of valuation of this land now planted as it is to what it was before it was planted?

A. Largely increased.

Q. About what proportion?

A. It has probably doubled in value on an average.

Q. What would you say was the average value per acre of this at this time?

A. It is impossible to say.

Mr. WORKS: You mean of the planted land?

Mr. HAINES: This newly planted land.

WITNESS: It is impossible to say.

Q. Well you can make an estimate can't you?

A. It is impossible to say what a piece of property is worth if you have no purchasers for it.

Q. Well what does the company hold it for then, if there were purchasers?

A. We are not offering this newly planted land, as I stated this morning, we expect to hold that until we have brought it into a producing state.

Q. At what were you holding this class of lands before you planted them, as an average?

619 A. Generally speaking $300, but we were not selling it at that rate.

Q. So if they were worth $300 unplanted, they would be worth about $600 an acre as planted.

A. If you had a purchaser.

Q. That would be about in round numbers $363,000 they would be worth now, or valued now, would it?

A. On that basis of figuring, but as you know they are not worth that in the market to sell. It would be absolutely impossible to sell for that figure.

Q. Well if one should come along who wanted to buy this land, what would the company ask them for it?

A. We are not offering it for sale for the reasons above given.

Q. The reason you are not offering them for sale is because the company wants to experiment with the raising of lemons and oranges, is that it?

A. We are bringing this land into a producing state for the purpose of demonstrating its value or getting the value out of it if it is in it. Whether the company may offer all its planted lands in the future or hold some of them for orchard purposes, I am unable to say.

Q. Mr. Boal, in making these valuations in this report of 1894, did you exercise your best judgment about the relative values of the property as compared one with another?

A. The values placed upon that property were——

Q. I would like to have you answer the question in the form in which I put it. (Question repeated by the reporter.)

A. Generally speaking I think I did.

Q. Now since that time there has been an addition to that pipe line. Can you tell how much in value?

A. About $69,000 I should say.

Q. And anything to the dam?

620 A. The wasteway was enlarged to the extent of about $13,000.

Q. Is that the only addition you would speak of to the dam since 1894 in the way of value?

A. Except that demonstrated by the overflow, which showed that it was a stable structure.

Q. I mean any expenditure upon the dam by way of increasing its valuation since 1894?

A. My recollection is that the amount named is what the wasteway cost us.

Q. I wish you would kindly give then the amount by which this

aggregate valuation of all the property would be increased by the additions to the pipe line and the dam since 1894?

A. Assuming all those values to have been constant to the present time and that all of our property was worth the amounts named—which of course is not true—it would be increased by the sum of those two amounts.

Q. Of $13,000 and $69,000?

A. Yes, $13,000 and $69,000—$82,000.

Q. Now these are costs of construction are they, $13,000 and $69,000?

A. Yes sir.

Q. It would be increased $82,000?

A. Yes.

Q. It would also be increased by the increment to this 605 acres of land by improvement?

A. It would.

Q. And upon the basis of the raw lands being worth $300 that would be increased $300 an acre, in other words about $185,000 increase in that land, is that correct?

A. That is not a true statement of the real increase, that is an assumption. If land is doubled in value by the planting—it is my judgment that that land is twice as valuable as it is, planted,
621 and after it has been maintained for two or three years, as it is when raw land, but we know that the raw land at the present time is not worth $300 per acre, so it is unfair to say——

Q. I was getting your valuations, I do not know to whom else to go except the manager of the San Diego Land and Town Company to get a valuation of their lands. Now what do you say about it?

A. I think Judge that you asked me at what prices we were holding lands three or four years ago, or in 1894, and I said generally at about $300 per acre.

Q. Can you give us an idea how much this 605 acres of land has been increased in value since 1894 by planting?

A. It has been increased in value by the expenditures that we have made upon it in that time. I believe the expenditures made are worth what they have cost us. Those amounts can be had from our books.

Q. And your idea was that it doubled the value of the land when it was raw?

A. I think it would be in the estimation of the purchaser, as when it was raw.

Q. If we had the value of the raw land we could get at it.

A. The value of the raw land would be about what you could get for it.

Q. And about what the company would take for it if a man wanted to buy?

A. Not necessarily. If we were to throw on the market 605 acres of land on Chula Vista, at any time since 1894, we could not get $200 an acre for it. I know that to be true because we offered quarter section 141 at that rate, and offered to pay commissions and

advertising charges and other expenses, and we have not sold an acre of it.

Q. You offered that at $200?

A. At $200.

Q. When was that?

622 A. That has been a standing offer for the past three years I should say.

Q. You have not reduced the price any below $200?

A. No, we have not offered it at any less than that.

Q. Have you sold any land under the system besides the first few tracts on Chula Vista for less that $300 per acre?

A. I do not recall that we have.

Q. Well what then in your judgment—would $200 be a reasonable estimate of the increment of this land—to compare it with all the rest of the property and valuations?

A. I would rather confine myself to the statement that it was worth what it cost us. I can get those figures for you.

Q. Mr. Boal, you certainly have some idea what that land ought to be considered worth in the market raw, or that quality of land.

A. If there had been any sales of land of that character in the last few years it would be possible to make an estimate of what it is worth.

Q. Do I understand you to say that there has been a very depressed condition in the valuation of all property under that system?

A. I am ready to make that statement.

Q. You do make it do you?

A. I do make it.

Q. Do the dam and pipe-line systems partake of that general depression in values here?

A. Yes, at the present rates we are receiving they partake of that depression.

Q. You qualify it by saying at the present rates. Do you expect this board to make a value on this property by raising rates?

A. Not at all, but they can depreciate the value of the property by refusing to give rates.

623 Q. Well the standard of this property ought to have been what you have been charging on it ought it not, rather than what you expect to charge, on the basis that you value it according to the rates, is not that true Mr. Boal?

A. I do not know that it is.

Q. You expect the board to raise the rate from what it has been established by you from 1888 down to January 1st, 1896, and base the valuation of the property upon that, is that the idea?

A. We expect the board to take the statement and determine what is the proper operating charges and the proper valuation of this plant, and give us what in their judgment is a proper rate. We have not asked for a determination of these matters by the board, but we expect to abide by that determination upon your request.

Q. You expect a full hearing before the board on that question?

A. We certainly do.

Q. And expect to have something to say to the board about it—now in your judgment Mr. Boal ought the board to proceed to first fix rates and then determine what the value of this property is from the rates fixed?

A. No.

Q. Or first find the value, and then fix the rates according to the value?

A. Find the value.

Q. Then when you are answering that under the present rates the value of the dam and pipe system has depreciated you do not mean to be understood as saying that you want the board to fix a rate in order that you may find out what the value of this property is?

A. We have been considering the value of orchards and other matters largely, in the late corss-examination, and not the
624 value of pipe line. Now the pipe lines and system generally depend upon whether they can be maintained upon the rates received. This question of operation and depreciation is a constant matter with us. It is an outgoing that no one can stop.

Q. Well according to your idea the danger to the system is from its depreciation?

A. Depreciation and operating charges.

Q. And because the rates yielded are not sufficient to maintain the system?

A. Yes sir.

Q. Well in 1889 the Exhibit One introduced by you shows that the expenses other than these legal and office and water-department expenses of repairing and operating were something over $7000, that is true is it not?

A. In 1889?

Q. Yes.

A. Yes sir.

Q. In 1890, $6300?

A. Yes sir.

Q. In 1891, $9,377?

A. Yes sir.

Q. In 1892, $8052?

A. Yes sir.

Q. In 1893, $8,496?

A. Yes sir.

Q. In 1894, $5,224.83?

A. Yes sir.

Q. Now that seems to show a decrease from a maximum of nine thousand-odd dollars down to $5,224.83. Does that indicate that the system was going to ruin because the rates were not high enough?

A. No it does not indicate that, it indicates or might indi-
625 cate at least that the repair of the system has been gotten down onto a more efficient basis than it was earlier, and if you had carried it a year further you would have found that the increase was very greatly over that.

Q. I was going to ask about that. I will now ask you about

1896. The expenses for that time were only about $5000 for the actual expenditures upon repairs and operation. That is less than it ever was before is it not, except the very first year?

A. It is.

Q. And when you come to the year 1897 the expense up to August 1st, 1897, was $2,544, and the estimated expense to the end of the year $1,162 more, making something in the neighborhood of $3,700, that is less than it ever was before?

A. It would so indicate.

Q. Now how do you account for the reducing of the actual outlay for repairs and operations from year to year?

A. Our constant aim has been to do this work just as cheaply and efficiently as possible, and if we have made any progress in that direction we are willing that the board should take account of it in fixing these rates.

Q. Well, if the pipe line has been depreciating so rapidly it ought to cost more, ought it not?

A. All of the depreciation cannot be made good in the running expenses of a system. As I stated this morning there are certain sections of the pipe system that must be taken out and replaced. Now that is a depreciation that we cannot take care of as we go along. We can fix a hole here and drive a plug there, and it will do for a time. In other words, we can lengthen out the life of the system by a careful system of repairing, but we cannot make good the heavy depreciation of the system.

Q. In the year 1895 the expense for repair and operation was $29,147 as given by this statement. What accounted for that unusual amount?

A. A very unusual flood in the Sweetwater river ac-
626 counted for it.

Q. What effect did that flood have upon the pipe system?

A. It washed out a large part of it.

Q. Where?

A. In the Sweetwater river near the dam.

Q. That pipe had been laid in the very center of the stream had it not?

A. I think not.

Q. Or nearly so?

A. I think it was laid for the most part just along the north side of the channel of the river.

Q. How was the pipe from the dam down through the gorge, a distance of say 1500 feet or 2000 feet?

A. My recollection is that the upper portion of it, the part near the dam, was laid just along the north margin of the stream. Further down it crossed the stream to the south side of the river.

Q. That is the great main of the system is it not?

A. That is the 36-inch main.

Q. How far was that washed out?

A. It was damaged throughout its entire length.

Q. What distance?

A. About 1600 feet, not every part of it was damaged, but here and there a section was, and some parts entirely washed out.

Q. And what was done to that in the way of repairs?

A. The pipe that could be repaired was used, and some sections that were entirely destroyed were replaced by new pipe and a section of the pipe line was moved from its old location north into the bed rock at the side of the canyon.

Q. If it had been placed there originally it probably would not have washed out would it?

A. It probably would not have washed out.

Q. So experience proves it would have been wise to have built it there in the first instance?

627 A. Yes sir.

Q. What about the expense of replacing that and restoring that 36-inch pipe 1600 feet?

A. I cannot segregate it from the amount given there. It is included in that $29,000.

Q. That was a very large part of it wasn't it?

A. Yes I think so.

Q. Was there any other work on the pipe line of the company as expensive as that?

A. Not for the same length of pipe line because that was the largest pipe we have.

Q. And not only so, but you say you put in into the rock, excavated, did you?

A. Yes sir.

Q. Blasted a place for receiving the pipe?

A. Yes sir.

Q. And walled it in there, covered it with masonry work and cement?

A. No not where we excavated into the solid bed rock. We covered it, but we did not wall it in with masonry.

Q. Now that was 1600 feet from the dam. Did you have to replace any more pipe on account of that flood?

A. There is a section of the 30-inch pipe from the end of the 36-inch pipe that was washed out and had to be relaid, the channel of the river changed considerably.

Q. How much of it?

A. I should say 1500 or 2000 feet was disturbed.

Q. Now what provision has been made against the recurrence of a like accident to that?

A. The pipe has been placed further back against the hill and riprapping has been done along the river channel just as there had been before. We had taken what we thought were reasonable precautions, but because of the unusual flood it disturbed it.

Q. Do you apprehend any such danger to pipe line No. 2

628 from any possible flood?

A. No.

Q. Why not?

A. We have taken some additional precautions against it.

Q. What are those precautions?

A. We have encased it in cement in a manner that we think will withstand a flood.

Q. How much of it lies in the canyon?

A. There must be five or six hundred feet in the canyon.

Q. It crosses over to the north side of the river?

A. It crosses to the north side.

Q. And then comes upon the mesa directly, does it?

A. It crosses the river again on to the mesa.

Q. What other new construction was necessary by reason of this flood?

A. We constructed some material additions to the wasteway of the dam.

Q. I mean in the pipe line?

A. I do not recall any.

Q. Was there any bridging done at any place?

A. Yes.

Q. Where was that?

A. Near Sunnyside.

Q. What was the occasion for that?

A. The pipe line had floated for a distance, and the bridging was put in to keep it in place.

Q. Had it been buried in the sand of the bottom there before?

A. It had.

Q. And the water washed in and raised it?

A. Yes sir.

Q. And so this new work was to put it upon trestle-work or something of that kind?

A. Yes sir.

629 Q. Was there any other considerable expense on the pipe line during the year 1895?

A. Not that I recall.

Q. How was it about the pipe on Fourth avenue?

A. Chula Vista?

Q. Yes.

A. There was a section, a mile section of pipe that we laid anew that year.

Q. That you count in the pipe-line additions do you as original work here, or is that in repairs?

A. That is in pipe line No. 2.

Q. Now this repair to the dam you spoke of, the wasteway—during the Neale litigation it is true is it not that pursuant to a decision of Judge Field the company was compelled to bore withadiamond drill through the rock and let out the stream—I mean lower the dam.

Q. Yes sir, we constructed a tunnel around the end of our dam to draw off the water, or rather to keep it down. We had drawn it off before.

Q. Have you utilized that in any way?

A. We have.

Q. In what way did you utilize that in construction—or was any

work done on that tunnel that was paid for with this $29,000 expenditure here in 1895?

A. I think not, I think that went into wasteway construction. We utilized that tunnel for taking the pipe line No. 2 out through there, and also in putting in three 30-inch pipes to be used for wasting water in case of a heavy flood.

Q. Was that all charged to new construction or partly to repairs?

A. So far as it related to pipe line No. 2, to the new line, it was charged to that, and the balance of it was charged to the wasteway I believe.

630 Q. Have you any idea of what the expenditure upon the wasteway was?

A. My recollection is in the neighborhood of $13,000—twelve thousand and some dollars.

Q. Was that put to the account of new construction?

A. It was and is now a part of the cost of the dam and is shown on that statement.

Q. It has nothing to do with that $29,000?

A. Nothing to do with that.

Q. What other extraordinary expenses over and above average years was occasioned by this flood or any other accident during the year 1895 than what you have mentioned?

A. I do not think I mentioned that we repaired some things about the dam. The stairway leading to the top was undermined at one point. There was nothing caused by that flood excepting to the dam and to the pipe line.

Q. Was there any serious injury to the north wall of the dam where it abutted into the side of the hill?

A. No, there was a wash around the parapet wall, but that did not abut into the hill, that stopped short.

Q. How much expenditure was put in there at the north wall of the dam in the way of repairs there?

A. I cannot say.

Q. Was it a considerable amount?

A. We lengthened out the parapet wall and ran it into the side hill, but I cannot tell you what the expense was. That of itself would not be great.

Q. Was there at any time any apprehension of trouble with the end of the dam on the north side?

A. I have been told—I was not here at the time but I have been told that Mr. Savage did what he could to prevent the water from running around that point, placing in sand bags and other obstructions.

631 Q. To prevent it undermining or washing out the footing into the hill on the north side of the wall of the dam?

A. We wanted to prevent it from washing out the hill at that point.

Q. So then this extraordinary expense of 1895 is attributable to the damage done by that flood?

A. Yes sir.

Mr. HAINES: In connection with Mr. Boal's testimony of the additions to the value of property since December, 1894, I will now offer in evidence for the purpose of showing—not absolute values but relative values—of the property of the San Diego Land and Town Company, what appears on the report of December 31st, 1894, on pages 14 and 16.

Mr. WORKS: What do you mean by relative values in that connection, do you mean the value of different items as compared with each other?

Mr. HAINES: Yes sir.

Q. Have you more than one copy of that Mr. Boal?

A. I cannot say. My impression is that I have several.

Q. Can you put one in and give it to the clerk?

A. If I have it.

Q. Were any improvements made upon the National City and Otay railway since the flood of 1895?

A. Yes sir.

Q. Do you know at about what expense?

A. I do not. May I ask a question? What am I to understand by improvements, additions?

Q. Any permanent repairs or improvements or betterments. I am not speaking simply of restoring, but of improving the property over and above what it was before the flood.

A. I would like to explain that in repairing the damages done by the flood we aimed to improve the bed to prevent a recurrence under similar circumstances or similar conditions. The road is no better for our use now than it was before the flood.

632 Q. Is not the grade better?

A. Slightly.

Q. Quite a good deal better, isn't it, on the whole?

A. It is some better, not very much. Still that was incidental you might say, in one sense, we did not undertake it for the purpose of that improvement.

Q. Do you regard the crossing of the Sweetwater now as being beyond danger of any accident by flood?

A. We do.

Q. Which was not true before?

A. It proves that it was not true.

Q. Were any other permanent improvements made upon the railway plant since 1894?

A. There were a number of other bridges that were lengthened at that time and the line was relocated down about Otay. At the same time one line was taken up and not relaid.

Q. As a whole is the property of that National City and Otay railway more or less valuable since 1894 than it was then?

A. It is more valuable solely for the reason that we believe it could not be injured by another flood of that nature.

Q. Is not the business larger than it was then?

A. Outside of the stone contract that we have been having I think the earnings are less than they were then. The tourist business, the winter business has gradually fallen off in the last few years.

Q. But the local business is larger?

A. The local freight business is larger. The local passenger business is not.

By Mr. SHAW:

Q. Mr. Boal, I think Mr. Haines has about covered the ground for the protestants as well as the petitioners, but there are one or two questions I would like to ask you. I understood you to say that the property of the company remains about the same now as it did in 1894 except that values have changed?

633 A. Yes, so far as lands are concerned.

Q. That is the values in land have depreciated?

A. Yes.

Q. Has any of the other property of the company depreciated in value?

A. All property has depreciated in value.

Q. All of the property has depreciated in value?

A. All property in this country.

Q. That includes the water system does it not?

A. Yes sir.

Q. Its value has depreciated in the last few years?

A. Yes sir.

Q. I understood you also to say that the value of raw land would be what you could get for it. Do you believe the same rule would apply to the water system?

A. If it were in the market and sold that probably would be the measure of its value.

Q. What you could get for it?

A. Yes.

Q. It was in the market to be sold was it not?

A. In the foreclosure proceedings it was, with other property.

Q. All of the property was sold I believe?

A. Yes sir.

Q. The company owns some property in Boston, does it not, owns some diamon-s I believ- as well as other property?

A. Yes sir.

Q. The diamonds were sold as well as all other property then?

A. I made a list of the property here, I did not include the other property.

Q. Do you know the value of the other property in Boston?

A. I do not.

Q. Have you any idea then of its value?

A. No.

634 Q. Your general expenses have been gradually reduced since 1895 have they not, with the exception of the one year, the flood year?

A. They have, as is shown by that statement.

Q. This statement is correct is it not?

A. As far as I know and believe.

Q. When did Mr. Savage take charge of the water department or water system?

A. My recollection is that he came the early part of 1891.

Q. Were those repairs made since that time under his supervision?

A. The first year or two he had a general oversight, but as I recall did not take charge directly of the work of repairs. We at that time had a general foreman.

Q. It was under his supervision though was it not?

A. Under his general supervision.

Q. And not under Mr. Schuyler's?

A. No.

Q. Do you attribute the reduction to the change in engineers?

A. No.

Q. You think the work done under Mr. Schuyler's supervision, and his construction, was as good as could have been?

A. You are not speaking of construction now as I understand it.

Q. Changing from the construction?

A. Mr. Schuyler has nothing to do with the items included in that column.

Q. He had nothing to do with the changing of that pipe line?

A. He had nothing to do with the expenses named in that first column.

Q. Not with the expenses—did he have anything to do with the changing of the location of the pipe leading from the dam down through the canyon.

635 A. He was consulting engineer with Mr. Savage when that change was made in 1895.

Q. There was some spiral pipe taken out and replaced. Was that on Fourth street in Chula Vista?

A. It was.

Q. Do you know the cost of making that change?

A. The cost of putting in the new line was in the neighborhood of—I would rather get those figures for you.

Q. Do you mean the pipe line No. 2?

A. That mile of 24-inch pipe is a part of pipe line No. 2.

Q. What was done with the old pipe?

A. The old spiral pipe?

Q. Yes.

A. It was taken out and piled up and sold for what we could get for it.

Q. It never was used for any other purpose, and is not in use today?

A. Not in use in the water system.

Q. Now did you ever use this spiral pipe for conducting water at all?

A. We did no.

Q. It was a complete failure?

A. It was.

Q. Do you know the cost of it?

A. I have made estimates as to the cost of all our spiral pipe, but I cannot give you with any certainty the cost of this mile.

Q. Do you include in this estimate of the cost of your water system the cost of that spiral pipe and the laying of the same?

A. We do.

Q. We would like to have the cost of that pipe and the cost of laying. Now this total cost of the water system of $1,026,022.79, does that include any new pipe which you have put in since
636 the system was constructed?

A. It includes all the new pipe we have put in since the system was constructed.

Q. Does it include the 36-inch pipe that replaced the pipe washed out by the flood of 1895?

A. No these were in short sections, a piece here and a piece there. It was not a continuous length of pipe such as the mile was on Chula Vista.

Q. Can you state to us what is included in the way of new pipe which replaced old pipe in this estimate of costs—I refer now to the pipe which was used in replacing the pipe originally laid?

A. The mile of new pipe laid on Fourth avenue Chula Vista was to replace spiral pipe taken out and never used.

Q. Any other?

A. So far as I recall there was no other continuous length of new pipe put in to replace old pipe. There were some new sections used in the 36-inch pipe.

Q. So that this estimate of $1,026,022.79 is the money expended in that water system up to the time of its completion in 1887, except pipe line No. 2?

A. The system was not completed in 1887.

Q. Substitute 1888.

A. It included all of that, and such additions as were made after 1888.

Q. And does not include any new pipe used to replace old pipe save and except the one mile of spiral pipe on Fourth street?

A. My recollection is that we have not replaced other old pipe with new pipe. We have transferred pipe from one place to another at times, but we have bought no new pipe to replace old pipe that had proved defective in use.

Q. To what head was the expense of transferring that pipe charged up?

A. It was generally charged to pipe line.

Q. Well to construction account?

637 A. We have no construction account, but it corresponds to construction account "pipe line."

Q. Was that included in this total cost of the water system?

A. It was. It is a very small item however.

Q. About how much?

A. I should say a few thousand dollars would cover it all, if as much as that.

Q. This morning you spoke of selling water rights where you had been compelled to refund the purchase price of the right, and named one which was sold for $1500 in Chula Vista, and which you stated you had been obliged to pay back. To whom was that sold?

A. It was sold to George W. Hale, or to the Bank of National City.

Q. I understood you to say that Judge Ross ruled that you had to pay it back?

A. He did.

Q. Did Mr. Hale bring suit?

A. The Bank of National City brought suit.

Q. Did they bring suit in Judge Ross's court?

A. Yes sir.

Q. An original suit, or by way of intervention?

A. I will refer that to the counsel please.

Q. The suit however was in Judge Ross's court?

A. Yes sir.

Mr. HAINES: Let me ask a question in that connection.

By Mr. HAINES:

Q. Mr. Boal, that water right was for 15 acres of land afterwards sold to Mr. Howe? Hewes

A. Yes sir.

Q. And it was one which Mr. Hall protested against being compelled to pay wasn't it? Hale

A. Yes sir.

Q. And in order not to lose his sale he paid it under protest, this $1500?

638 A. Yes sir.

Q. That is not the case with Mr. Howe, he did not pay it under protest?

A. He did not.

Q. Or take any contract to have it back if any court should hold that he should not be required to pay it under protest—no one else took any such contract as that except Mr. Hale?

A. Oh yes a number of them.

Q. You gave to a number of them in National City?

A. Yes sir, I do not remember just who they are, but there are a number of contracts of that nature. I do not recall just who they were with.

Q. That you have in fact paid, already paid?

A. No, but that were paid under protest and the same sort of receipt given.

Q. That was against the old company?

A. Yes sir.

Q. And the old company has nothing left to pay them back with has it?

A. I suppose not, but probably the obligation holds under the new, I do not know as to that.

Q. Those payments under protest were all in cases where the parties were not willing to buy a water right, but were compelled to do so in order to get water?

A. That was true with every one who took a water-right contract. None of them were willing to.

Q. But only a limited number paid under protest and took any such contract to refund, is not that true?

A. I think the greater number paid in that way, than those who did not.

By Mr. SHAW:

Q. Mr. Boal, you spoke this morning of charging up the interest on bonds to the extent of $300,000 to the water system. That was the amount was it not?

639 A. Yes.

Q. The deed of trust or mortgage securing those bonds was a blanket mortgage was it not, covering all your property?

A. The mortgage of 1895 was the last mortgage, a mortgage for a million dollars—I think it was 1895.

Q. Those were the bonds on which you paid the interest on the $300,000?

A. The bonds under that mortgage were never sold, there was a former mortgage that covered certain of our properties, that they were sold.

Q. That covered what?

A. Covered certain of our properties.

Q. What was the amount of the bond issue under that mortgage?

A. $500,000.00.

Q. And you charged the interest of three-fifths of it to the water company?

A. Finally. At the same time we were borrowing other money at that time with which to complete pipe line No. 2.

Q. Was there any other reason for that other than the fact that you were using this money and making improvements in the water system?

A. We used part of the six or seven hundred thousand dollars that we had borrowed finally in some other way. We made improvements in our orchards and in our railroad, to a certain extent.

Q. That is, used a part of the money which you borrowed on those bonds?

A. Which we borrowed on the bonds and otherwise.

Q. You used it in improving your lands?

A. Part of it, we only charged up part of it to the water department.

Q. You charged up the interest on $300,000 of the $500,000

640 to the water company, did you not?

A. Yes.

Q. Did the water company use that much of the money?

A. I think so.

Q. And you simply used the balance of your property as a security to borrow money for the water system, that was the effect of it, was it not?

A. The water plant was included in the mortgage securing the $500,000, if I recollect correctly.

Q. Was this amount of interest which you charge the water plant with its share and only its share?

A. To the best of my judgment only its share.

Q. And $300,000 of that $500,000 was used by the water company for the benefit of the water system?

A. Yes I think so.

Q. Now in regard to depreciation, you figure that at six per cent. upon both pipe lines?

A. I do.

Q. What is the aggregate cost of both pipe lines?

A. It is named in the statement which has been submitted to you.

Q. $626,551, will you tell me what six per cent. annually upon that amount is?

A. As I make it here $37,593.09.

Q. And those pipes have been laid in the neighborhood of ten years have they not?

A. Some of them have.

Q. So that every ten years the depreciation would be ten times that sum which would be $375930.

A. It would not.

Q. What would it be?

A. It would be on part of the pipe line, and on part of it it would not.

641 Q. On what part would that be true?

A. It is very difficult to figure out off-hand. We laid considerable pipe line about 1890.

Q. Well assuming that it was all ten years old, then it would be true would it not?

A. That would be the depreciation, with those figures, to us, but not to the consumer.

Q. So assuming that the original cost of the pipe line was $626,551 and that it has been laid ten years, and that the depreciation is what you say it is, it would leave the present value of the pipe line $250.621, would it not?

A. If there were any reason for those estimates, it would be true.

Q. And in this depreciation claiming that you are entitled to six per cent. per annum for depreciation, you make no allowance to the people or to the water-consumer for interest on that sum do you?

A. We do not.

Q. So that if you were allowed six per cent. depreciation upon the pipe line, it would amount in ten years to $375,930 which the people had paid you, and for which you would refund to them no interest?

A. If we had received that sum we would unquestionably be willing to refund them a large interest, but we had not received it, and have not.

Q. You would be, if you were allowed that?

A. If we received it we would allow them an interest.

Q. You think the old company would have refunded it to the people, but they allowed the property to be sold under the mortgage?

A. If they had received that sum it would have gone very far towards keeping the company alive.

642 Q. You would not have used it in the way of keeping the pipe line up—would you have proposed to use that money to pay salaries, and running your railroad at a loss?

A. It would be improper for us to use it up where the people could not get it again.

Q. It would be a temptation however to do so, and from your experience with the San Diego Land and Town Company of Kansas, as well as that of Maine, don't you think they would do so?

A. I have no reason to do so.

Q. Mr. Boal, from your experience as well as observation of irrigation of lands in California is it not probable that where water is used upon a large area of land constantly for three or four years, that a less quantity of water is required for keeping orchards in condition than where it is used in isolated cases and in small tracts? In other words it is stated that in Fresno by continued use of irrigation they have now ceased to irrigate their vineyards, due to the fact that the ground has become saturated with water and irrigation is no longer required?

A. I have no doubt that is true in certain land. It must be true in all lands that lie in a valley, and it may be true to a certain extent in such land as Chula Vista where the slope is gradual, but I cannot say that I believe it would be true in all cases.

Q. But you think it would be true as to a great portion of the land under your system would it not?

A. It would be true in valley lands I have no doubt, and it probably would be true of some of the slopes in Chula Vista but not on others.

Q. But not on the steep slopes?

A. No.

By Mr. HAINES:

Q. Mr. Boal, I observe in this Exhibit One introduced by your company, that the water rates collected up to August 1st, 1897,

643 are only $13,196.18 and the estimated collections for the remainder of the year only $9,425.85, making a total if I have added correctly, of only $22,622.03 as against $29,502.16 for the year 1896. How do you account for that falling off?

A. This statement shows the actual amount of money collected in all cases. In 1897 at the time the books were made up, August 1st, there was a considerable sum uncollected and the estimate that was made from that time on was in proportion only to the amount that was collected preceding that date. I think you will find from an examination of our books that there is a large part that will

eventually be collected, and raise that estimate for the balance of the year.

Q. Is there any reason why if the same rate of $3.50 per acre were collected outside of National City as was collected in 1896 the rentals in the aggregate should not amount to as much as for 1896?

A. I think they will amount to about the same.

Q. A little more land has come under irrigation since then has there not?

A. A very little more.

Q. Is it not a fact that after July 1st, 1897, the company refused to receive from land-owners any rates because they refused to pay $7.00, and offered to pay only $3.50 per acre?

A. Yes that is true.

Q. That is the company insisted upon $7.00 or nothing, and the consumers insisted upon paying $3.50 or nothing?

A. The company insisted upon applying the amount received on account, claiming the right to receive $7.00 an acre instead of $3.00 an acre, and in cases where a receipt was required by consumers stating that the amount paid was to cover in full the amount, we did not receive any.

Q. Were there many instances where the rates were remitted to your company at $3.50 per acre per annum and were returned by you?

644 A. Yes, the cases I spoke of just now.

Q. But you see no reason why if this controversy had not come up between the company and the consumers, the receipts should be any below what they were in 1896?

A. I think they would be about the same.

Q. Well isn't it true that the rates on the whole have increased annually from the very beginning of this system—I mean the receipts from water rates.

A. The statement shows just what has happened. The increase between 1895 and 1896 would not hold good between 1896 and 1897 for the reason that there has been no such large body of new land put under irrigation as there was in those years.

Q. How much has been put under irrigation since 1896, under the system?

A. I cannot tell, I have not made up those figures.

Q. Can you get it from Mr. Savage?

Mr. SAVAGE: Approximately fifty acres.

WITNESS: Approximately fifty acres.

Q. This suit of Lanning against Osburn was brought January 1st, 1896, was it not?

A. That is my recollection.

Q. About January 1st or January 4th, 1896—that was the first controversy between the company and the consumers outside of National City was it not?

A. I believe we asserted our right to raise the rates early in 1895, but withdrew.

Q. And promulgated the increased rate to take effect January 1st, 1896?

A. Yes sir.

By Mr. SHAW:

Q. When did you increase this rate, January, 1896?

A. We notified the consumers that we would increase it at that time.

645 Q. To begin January, 1896?

A. Yes sir.

Q. That is, to increase it from $3.50 to $7.00 an acre?

A. Yes sir.

Q. You did not collect it did you?

A. We did not.

Q. Did you accept $3.50 the old rate?

A. We did.

Q. For the year 1896?

A. We did.

Q. Then in 1897, the beginning of 1897, what was the rate?

A. We were still operating under the order of the court, as I understand it.

Q. That is the $3.50 rate?

A. Yes sir.

Q. Then in July, 1897, what was the rate then?

A. In the early part of the month we were still receiving the same rate of $3.50.

Q. That is the early part of what month?

A. July.

Q. You were still receiving the same rate of $3.50 per acre per year?

A. Yes sir.

Q. Are you still receiving that rate?

A. We are willing to receive it on account.

Q. Is the horticultural department of the land and town company paying the new rate of $7.00 per annum?

A. It is not.

Q. That is kicking, too, is it? I think if we are making this fight for you people you ought to put up.

A. We are willing to pay it, the horticultural department is.

Q. You received $3.50 in the month of August too, didn't you, accepted it?

646 A. I do not know whether we did or not.

Q. Now Mr. Boal, I understand you to say that your total taxes upon all the property of the land and town company amounts to about eighteen or twenty thousand dollars per year?

A. In that neighborhood.

Q. What is the tax upon the property of the water system, or upon the water system?

A. As shown by that statement.

Q. Well for the year 1896 this shows $3,444.20. Do you segre-

gate that from the other property, from the tax on the other property?

Mr. WORKS: He has explained all about how he segregated that, in answer to Mr. Haines.

Mr. SHAW: This is for the petitioners, and that was for the protestants.

Q. Did you segregate it yourself, Mr. Boal?

A. Yes sir—under my directions.

Q. This $3,444.20 for that year you considered a fair proportion of the taxes, that is of all the taxes for the water company?

A. It is not a matter of proportion at all, it is a matter of actual computation and demonstration from the tax receipts.

Q. From the tax receipts?

A. Yes.

Mr. SHAW: That is all.

WITNESS: I would like to say that the taxes for the year 1894 amounted to $22,273.47.

By Mr. WORKS:

Q. Mr. Boal, you said that after the suit was brought in Judge Ross's court you accepted the $3.50 rate. That was by reason of an order made by Judge Ross was it not that that rate should be accepted until the litigation was determined?

A. It was.

647 Q. And that order stood until he rendered his final decision holding that you were entitled to the $7.00 rate?

Q. And then it was dissolved?

A. Yes, sir.

Q. And then as I understand the question arose between your company and the consumers again as to your right to collect that $7.00 rate?

A. Yes, sir.

Q. And upon that question arising again this proceeding was commenced, and you are simply awaiting the result of those two cases to determine what your rights are?

A. Yes, sir.

Q. Now with reference to the water-right contracts you made I find in this one that is submitted by Mr. Haines with reference to the annual rate this clause, after obligating the party to pay for the water right: "And they will promptly pay all annual water rates and charges for the water to which they are entitled under and by virtue of this agreement at rates fixed by the party of the first part as allowed by law, and at the times, in the manner and according to the rules and regulations made and adopted by the party of the first part, the annual rental for the amount of water to which the party of the second part is entitled, and under this contract to be paid whether the same is used or not, and also to pay for all water used by them on said land for domestic purposes at the rates fixed by the party of the first part and allowed by law," was that provision

requiring the parties to pay the annual rates included in all the water contracts you made?

A. It was included in the form of application used by us in the last three or four years.

Q. I am not speaking now of the application, but of the water-rate agreement?

A. Oh they are all the same.

Q. Were any contracts ever made by the company for a
648 water right without a provision requiring the party at the same time to pay the annual rates?

A. They were not.

Q. Now you have been asked whether you think the company ought to be charged up with the amount that is paid for the water right as against the amount that it has expended in constructing its works. Have you in any of those statements that you have made up, the one that is here or any of the others, ever made any charge against the consumers for interest or anything else on account of the value of your water right?

A. We have not.

Q. What water rights have the company in connection with its system?

A. It has the right to the water it can impound in the Sweetwater river as I understand it, so long as it makes use of it.

Q. Did it procure this by filing on the stream?

A. Yes sir.

Q. And acquiring the water rights?

A. Yes sir.

Q. And as I understand you, nothing has ever been charged up against the consumer directly or indirectly for the value of those water rights?

A. Not that I know of.

Q. That being so, why do you say you think it might be right to charge the company with the amount it has sold the water right for, when it makes no charge against the consumer, and take that amount out of the money it has actually expended for construction?

A. I do not know how to answer that Judge. I do not quite get what you are after I am afraid.

Q. Are you of the opinion now that where the company itself has not charged up the interest upon its water right, or made any charge against the consumer in any other way, that when it sells
649 simply a water right that that should be charged up and deducted from the amount that it has actually expended in constructing and building its system?

A. Well there are several views I think to be taken of the disposition of the water-right matter, and the one that we have adopted seems to be to accept that payment as a right, as a preferred right if you want to consider it in that way, to the use of water from our system. It is a valuable thing in that it secures to the owner of that water right a supply from the system that cannot be taken by any subsequent applicant.

Q. Your system was not able to supply all of the land under the system?

A. It is not.

Q. And the purchaser of a water right or the acquiring of a water right by putting the water upon the land would give the taker of the water a preferred right to that quantity of the water as against everybody else who might come later, is that the understanding?

A. It certainly would secure to him that. Of course by the conveying of water to land we shall have lands some time that we cannot supply of our own, by reason of having parted with the water to other users.

Q. You have been asked about what has been done by the Boston office. Who has managed the financial part of the water company and furnished the money to supply its losses in furnishing water to consumers?

A. The Boston office.

Q. Has the office here had anything to do with that branch of the work?

A. Nothing.

Q. And the issuing and selling of the bonds, has that been done through the Boston office?

A. It has.

650 Q. Has there been any money borrowed or furnished through the Boston office at any other times to make up the losses of the company and keep it going?

A. It has borrowed large sums of money from time to time not covered by the $500,000 bond issue.

Q. Has not that all been done through the Boston office?

A. All of it.

Q. But for the aid that has been received through that office in that way could the company have been operated and these betterments made, and repairs to the plant, at all?

A. I think not, it would have gone the way of all other concerns in this country.

Q. Well the company has not made enough out of its sales of water and water rights all together to pay its operating expenses and make these repairs and improvements to the plant, has it?

A. It has not.

Q. And money was necessary to be raised from other sources, through the Boston office?

A. It was.

Q. And you have been asked about the amount paid to attorneys. Have you found it necessary in the management of the affairs of the company to have attorneys?

A. We have found it necessary.

Q. A very necessary evil?

A. They have been with us, very.

Q. Would it have been possible to have managed the affairs of the company successfully without the aid and advice of attorneys do you think?

A. I think not.

Q. Then that would be a necessary part of the managing affairs of the company would it not?

A. I think so.

Q. Mr. Boal, can the company realize any profit at all upon a rate of $3.50 per acre, in connection with the domestic rate
651 that prevails?

A. It cannot.

Q. Is it not true as a matter of fact that at that rate in supplying all the water that the company will be able to supply, taken in that way, the company would be losing money constantly?

A. It certainly would, taking the replacements that are now needed,—will be needed.

Q. Those replacements are necessary in order to supply the waters to consumers are they not?

A. They certainly are.

Q. You have said something about the probability of being able to supply a larger acreage if water were supplied at a price to be paid per gallon rather than per acre. When this controversy first arose between the consumers and the company was any effort or proposition made by the company to induce consumers to take water upon that basis?

A. That was the basis of the rate proposed by us, so much per thousand gallons.

Q. Did you have any discussion with the consumers or a committee of the consumers, with a view of trying to compromise upon that rate of so much per thousand gallons?

A. Yes sir.

Q. And was that idea urged upon them at that time that if the company could sell its water at so much per thousand gallons that the party who used the water economically could save that much and at the same time the supply of water that the company could give to others would be increased?

A. I think that argument was used with them.

Q. What do you think would be the result of making the change from a rate fixed at so much per acre, and a charge made by the thousand gallons, say two cents a thousand gallons?

A. The effect of changing to a thousand-gallon basis would be that every user would have a direct interest in the economi-
652 cal use of water and would consequently use less than if he took it by the acre and had no interest in using it savingly.

Q. What is your judgment as to whether the use of water has been excessive or extravagant?

A. The use seems to be decreasing in the last two years for the reason that water-users themselves have thought that their fruit was injured or that the trees were injured by an excessive use.

Q. I understand you to say that the inability of the company to furnish a larger acreage has resulted largely from this excessive use or the use of too much water per acre?

A. Our inability to furnish larger acre has resulted from the use of so much water, and as we believe from an excessive use—unnecessary use in some cases.

Q. Something has been said here about the use of water for domestic purposes being included in the 350,000 gallons that you allow at two cents per thousand gallons. Do you know of any such price as that ever having been fixed for domestic use?

A. I do not.

Q. Would that be a reasonable amount to charge for water for domestic uses, two cents a thousand gallons?

A. I think not.

Q. How much water would an ordinary family say of four or five persons probably use in gallons?

A. Per day or per annum?

Q. Well say per day, or have you made any estimate of it?

A. I have not made any estimate of that.

Q. Have you any idea without making any estimate with reference to it?

A. No. I happen to know what some cities use per head, but that includes sprinkling streets and flushing sewers and so forth.

Q. Now with respect to the increased value of the lands of the company by reason of the water supply that the company
653 had, you say that after the water supply was in condition to be applied to the land the price was largely increased, or the value?

A. Yes sir.

Q. Was not that true also with reference to land owned by other persons than the company in the neighborhood?

A. It was true of other lands.

Q. Were not the lands of other persons owned in Chula Vista sold for the same price that the company was selling its lands?

A. I think so.

Q. And there was no additional value placed upon the lands of the company by reason of water being accessible, over and above the prices that were prevailing in the case of lands in other places was there?

A. No additional value.

Q. At that time there was no expectation on the part of the company to charge for a water right, either to persons to whom it sold land or to persons who owned the land themselves, was there?

A. There was no such plan.

Q. How many of the consumers out of the whole number, or perhaps I had better say what number of acres owned by consumers taking water were purchased directly from the company as compared with the number of acres held by outside consumers who neither bought from the company or bought water rights from the company?

A. I have not gone over those figures for so long a time Judge that I haven't them in mind.

Q. Perhaps you might get those Mr. Boal. We may want them.

Q. And you have been asked with reference to the effect upon the value of the water system of the company of the rates to be allowed. I presume if such rates are allowed as would entail a con-

stant loss upon the company the plant would be practically worthless would it not?

654 A. It would as a water plant be worse than worthless.

Q. And if such a rate is allowed as would return the ordinary interest that might be made out of other classes of business, then it would be worth what it cost would it not?

A. I think so.

Q. With respect to the depreciation, what would be the final effect if you charged up against the company as a reduction of the value of its plant, all the depreciation that is constantly going on and nothing was allowed to offset that loss to the company in the way of rates?

A. The company would lose its entire investment in about fifteen or sixteen years, with nothing to show for it.

Q. With respect to these remittances that were sent in for the annual rents, and returned, were not those accompanied by specific receipts that the consumers required to be signed that would waive your right to collect the larger compensation that you claimed you were entitled to?

A. That was as we understood it.

Q. Well, they only offered to pay upon your signing the receipt presented by them?

A. The usual form of those remittances I think was about this. Mr. Haines, for instance, sent in a check in the corner of which he said: "For water rent for the quarter beginning July 1st, 1897," and as we understood it an indorsement of that check would constitute a receipt on our part that that was a total payment for that quarter.

Q. Well did something like that occur with reference to other consumers who were tendering the $3.50 rate?

A. That was the usual form in which those came in.

Q. Now with reference to the additional rents coming in by reason of greater irrigation in 1896 or 1897, has that grown largely out of the fact that the company itself has increased its acreage,

655 or does it come from other parties who have enlarged their orchards?

A. In 1895 and 1896 it was largely on account of the company's planting.

Q. Has there been any considerable receipt of revenue on account of additional planting from other persons than the company in the last two years?

A. I can make a calculation and perhaps I can tell. (After calculating.) I am unable to tell from the figures at hand, but as our planting was increased in 1895 by a 367¼ acres I should think it was largely responsible for the increase in the amount received the following year.

Mr. WORKS: That is all.

Mr. HAINES: I wish to ask a few questions.

By Mr. HAINES:

Q. Mr. Boal, your attention was called by Judge Works to Mr.

Howe's water contract. If I understand you, you say that Mr. Howe's taking that contract and paying the price for a water right gave him the prior right to that water from that time on?

A. I said it might be construed in that way—be preferred to a man who might apply today, or next year.

Q. Now the great bulk of people who bought of the land and town company bought before you gave these express water rights did they?

A. They did.

Q. Have they no protection in that way. Can you take their water away and give it to some one else?

A. We cannot.

Q. What is the use of this water-right contract then, and the payment of the $50?

A. We looked upon the water-right contract generally, whether it was given to the purchasers of our lands or others—par-
656 ticularly to the purchasers of our lands—as more clearly defining the quantity he was entitled to, and some other matters.

Q. That is, you required this contract between the purchaser and the company, to put in some additional condition in favor of the company, and limit the water supply to one acre foot?

A. That was one of the objects. At the same time the water had been limited before that, under our rules and regulations.

Q. But you wanted them to subscribe a document which made the limitation upon the amount of water, reducing it to one acre foot?

A. Yes, we thought there were mutual obligations which were more clearly set out in that way.

Q. The company has always recognized has it not that people who bought from it and got the use of water had the right to the flow and use of the water through the system as a perpetual easement as defined in section 552 of the Civil Code?

A. It has.

Q. So this written contract was not necessary to give them that perpetual easement at all?

A. No.

Q. Now what do these people pay this $100 an acre for in your judgment aside from any theories?

A. Well there are a great many constructions that have been placed upon the meaning of water-right contract as you know.

Q. Yes, what is your conviction about it?

A. I would rather not say what my own convictions are.

Q. No, I will not ask you to answer that—but in what you have stated you are rather stating the theory of the company as promulgated by its counsel are you not?

A. Yes, the counsel and the officers who have charge of those matters.

Q. Wouldn't it look reasonable to you that if a man pay $100 an acre for a water right for an acre foot of water to be delivered at the land, that that is really the purchase of the use of that system?

657 A. If I were a purchaser and were called upon to pay that I should of course consider what I was paying it for. I might be perfectly willing to pay that without acquiring the easement. It is a matter that I might voluntarily pay simply for the reason that I could get water in that way.

Q. But if you could get water without, you would not be apt to pay it, would you?

A. I would not be apt to pay it.

Q. How much do you expect to spend in replacement of pipes the next year, have you made an estimate?

A. We will make those estimates on Monday next, and I would rather bring it in at that time. We have been getting propositions and are now ready to make estimates.

Q. You do not consider that if irrigators learn that too much water harms their trees, that it is necessary to raise the rates to teach them not to use too much?

A. No, they will stop using on their own accord, but they may not be as careful in other directions as if they pay by the thousand gallons, the waste——

Q. But they might pay by the thousand gallons without increasing the rate might they not? That method of determining the rental might be applied without raising the rate?

A. That might be applied if the rate were low enough.

Q. In other words, it is not necessary to raise irrigating rates from one cent a thousand gallons to two cents a thousand gallons in order to apply that way of measuring it?

A. Not at all. You could apply that measure if you charged one-tenth of a cent a thousand gallons.

Q. Judge Works asked you whether there was not a like increase in the lands of persons other than the company by reason of this water supply. How do you account for the fact as you answer, that there was a like increase?

A. From the fact that they could get water by applying for it.

658 Q. The company just gave the water to outsiders and asked them no price in the way of a water right?

A. They asked them no price at that time.

Q. As long as that lasted those lands sold showed equal with the company's didn't they?

A. They did.

Q. Right in competition with the company's lands didn't they?

A. They did.

Q. Did any of the agents of the company engage in buying and selling outside lands with this water at any time?

A. They may have done so.

Q. Well the company stopped that policy after awhile, didn't they?

A. About the fall of 1892.

Q. They considered that it was not fair to the company to be giving away these water rights to outsiders and charge the people who bought land of them for it, is not that about true?

A. They certainly proceeded on the theory that they ought not to give away water rights.

Q. Since that time, since 1893, are these outside lands as valuable as the company's lands with water?

A. They have depreciated to the extent of our water-right charge about.

By Mr. SHAW:

Q. Then Mr. Boal the value of your lands was due to the representations of the company to the effect that purchasers should have water at $3.50 per acre, provided they would go on them and improve them, was it not?

A. I do not know that that is so.

Q. What is your judgment?

A. My judgment is that a low rate was some inducement to purchasers.

659 Q. And enhanced the value of the lands?

A. I think at the time those lands were sold that a water right would have had very little influence upon the price of the lands.

Q. If the people had been informed or had known that you would seek in a few years after they got their orchards started and their homes established, to increase those rates, do you think that the lands would have sold as rapidly?

A. I think if they had known that the rates would be increased they might have made some objection to them.

Q. In the price of the lands, and in the sale of them?

A. It was I think understood by people who talked with Col. Dickinson, the general manager at that time, that the supervisors had a right to change those rates.

Q. But do you not know that it was represented to purchasers that it was not likely that the rates would be changed, that they were based upon the number of acres of land which the system would irrigate, which would afford the company ample revenue?

A. I do not know that purchasers had all that explained to them.

Q. Do you know that it was not?

A. I do not know that it was not.

Q. Then the value of adjacent lands not belonging to the company sold as readily and at the same price, so long as the company furnished water at the same price?

A. They did.

Q. So that the value of the lands would fluctuate according to the charges made for water for irrigation would they not, your own lands as well as outside lands?

A. That might be the fact.

Q. That has been the fact has it not on lands outside of Chula Vista and outside of the lands of the company?

A. The lands outside of the company, the value of those
660 lands changed when we asked for a water-right charge.

Q. And the land depreciated to the extent of the charge hat you asked for the water right?

A. Yes sir, practically.

Q. And under the theory of the company—not your own theory—the buying of the water right was merely the purchase of the privilege of buying water for irrigating their orchards?

A. Yes, that is the way I understand it.

Q. To illustrate, just as though a farmer should come to a merchant and pay him $25 for the privilege of buying sugar for himself and family for a year at the market price of sugar?

A. That might be one illustration.

Q. Now you were selling water rights at $100 per acre?

A. We have sought to sell them at that price.

Q. That is the price that is asked?

A. Yes sir.

Q. If the system were capable of irrigating 20,000 acres of land as contemplated by the system, and in the design of it, and you sold water rights at $100 per acre for the 20,000 acres of land, it would bring in to the company two million dollars would it not?

A. It would.

Q. Giving them a million dollars over and above the cost of the plant?

A. Yes sir.

Q. Under those circumstances, and assuming that that had been accomplished, do you consider that it would be just to require of the purchasers of that water right to still pay a revenue besides operating expenses, management and repairs on the plant?

A. Well I stated pretty fully the understanding I had of water-right matters. I think it applies in all cases.

Q. (Read by the reporter.)

A. Do you want it answered?

Q. Yes sir.

661 A. If we had received two million dollars for it it would seem unreasonable to expect an interest charge besides.

Q. That being true, is it not equally unjust to expect from those who have paid the hundred dollars for water right, or paid for the water right in the enhanced value charged for the land, a net revenue?

A. The same principle would probably apply throughout.

Q. Do you know the amount that the company has derived from the sale of lands up to the present time?

A. I have those figures at the office.

Q. In the neighborhood of two million dollars is it not?

A. In the neighborhood of $500,000—in National City and National ranch combined. Most of that was principally town lots in the city of National City.

Q. In reply to a question of Judge Works you stated that the company could not be managed successfully without the aid and advise of attorneys. I will ask you if it has been managed successfully with the aid and advice of attorneys? In other words, could it be much worse?

A. I do not think the attorneys were responsible for the results

any more than they were for some other companies in California that have gone to the wall.

Q. Mr. Boal, have you a meter at the dam that measures all the water that goes out from the reservoir?

A. We have not.

Pending the further hearing in this matter, the board adjourns until Tuesday afternoon at two o'clock.

662 TUESDAY, *October 12th*, 1897—2 p. m.

The CHAIRMAN: It has been moved and seconded that Mr. Whitson be instructed to furnish a transcript as soon as possible of this testimony. Those in favor of the motion say aye. Contrary. Carried.

Mr. SHAW: Now Mr. Boal, I want to ask you a few questions. I thought we were through, but we find we are not quite through.

JOHN E. BOAL, recalled, testified as follows:

By Mr. SHAW:

Q. In regard to this legal expense, your legal expense for 1895 and 1896 was $1200 a year. Up to August 1st, 1897 these expenses are placed in your schedule as $991.62, with an estimate for the remainder of the year of $500. Why is that increase?

A. We have charged into this year some of the court expenses that we have been to in prosecuting——

Q. What court expenses?

A. Some of the National City suit, very little of that, and the larger part would be the expenses incurred in Judge Ross's court.

Q. What suit do you refer to in Judge Ross's court?

A. It was Lanning against Osburn, was the title of it.

Q. Were the expenses in the National City cuit and Lanning against Osb*orne* incurred this year?

A. The parts that have been charged into this account have been incurred this year. We have not gone back.

Q. What were those expenses, court's costs?

A. I do not remember just what they were, they accrued from month to month.

Q. Does it include the traveling expenses of your attorney or yourself or any officers or directors of the company?

A. I think not. If any traveling expenses of our attorneys have been charged up—which I do not remember about—they
663 would go into that. My impression is that no expenses of that nature have gone into that.

Q. In this item of attorney's fees or attorney's charge rather, is that made up of fees which are charged by your attorney for his services?

A. We pay our attorneys a stated salary, and as I testified last week we charged up half of that salary to the water department.

Q. That salary is $2400 a year?

A. It is.

Q. Payable in money?

A. Payable in money.

Q. Have you paid it in money or in real estate?

A. To what time do you refer Mr. Shaw?

Q. For the years 1895, 1896 or 1897?

A. I think for all of 1897 we have paid it in money and it may have been for part of 1896 we paid it all in money. Preceding that time we paid it half in money and half in real estate.

Q. Your contracts now call for payment of $2400 a year in cash do they?

A. It does.

Q. Now in the dam you figure two per cent. depreciation do you?

A. Yes sir.

Q. In the item under depreciation of dam for the year 1896 I find the depreciation placed here at $5,874.21, and for the year 1897 up to August 1st it is placed at $4,625.32 with an estimate of $3,304.50 making for the year 1897 $7,929.02. Will you explain that?

A. For the year 1896 the depreciation was figured at two per cent. on the dam, and for 1897 it was figured both on the dam and reservoir, the cost of reservoir land.

Q. Both on the dam and reservoir lands?

A. Yes sir.

664 Q. That is you now figure that the reservoir lands depreciated two per cent. per annum?

A. Yes.

Q. I understood you to testify last week that the duty of the reservoir was about 6,600 acres?

A. I do not recollect that testimony.

Q. What do you place it at now?

A. My figures have been on a basis of so many billion gallons. I doubt if I stated in acres what the capacity of the dam was.

Q. What would you place the duty of the reservoir and system at in acres?

A. It depends entirely upon what the irrigators use.

Q. Well assuming that they will use the water for irrigation in a reasonable manner?

A. That word reasonable is capable of so wide a meaning that it is rather a dangerous thing to estimate the capacity in acres.

Q. I say assume that for the purposes of this question any way, and answer the question?

A. May I ask you to assume a basis in thousands of gallons *of gallons* per acre, and then I will figure it up for you.

Q. You certainly can—when I am upon the witness stand.

A. If I were to assume a use of 350,000 gallons per acre the capacity would be from 5,714 acres to about 7,000 acres. If you assumed a less number of thousand gallons per acre the capacity would go higher.

Q. Now this excludes the streets does it not? You mean land which is in actual cultivation?

A. It as I say is based upon the use per acre. If they use

350,000 gallons upon a net acre, it of course would exclude a portion of the streets.

Q. In your judgment does reasonable, proper and necessary irrigation call for the use of 350,000 gallons of water per acre during the year on ordinary citrus lands or such lands as you have
665 in Chula Vista?

A. I think that average is sufficient for the lands under our system, but it will vary very greatly from the valley lands to the mesa. We have one orchard on Chula Vista that requires irrigation only twice a year, and one year but once, but that is an extreme, and there are other places that take irrigation frequently.

Q. What is the difference between this orchard you speak of on Chula Vista which required irrigation only twice a year for one year and once for the other, and the other lands contiguous to the orchard?

A. There are no surface indications that will account for the difference.

Q. From your experience as an irrigator, and your observation of irrigation the way it is carried on at Chula Vista particularly, do you not consider 350,000 gallons of water per acre an excessive amount for irrigating the orchards?

A. We believe that it is higher than is required, if the irrigators will exercise care in the use of water.

Q. Well, assuming now that the irrigators would exercise care in the use of water, and would only use it to a reasonable and necessary extent, what quantity of water per acre would be required for irrigating the orchard?

A. My judgment is that the use would range somewhere between 250,000 gallons and 350,000 gallons per acre.

Q. And the duty of the system if 250,000 gallons were used would be correspondingly greater than the figures which you have given us?

A. Certainly.

Q. When did the company and its officers or you as its manager first conclude that the duty of the system was only six or seven thousand *cares*?

A. I cannot state the time. It has been a matter of experi-
666 ence with us as we have gone along and noted the amount of water required from year to year to irrigate the acreage, it has gradually developed that the capacity was somewhere around 6000 acres.

Q. Well can you tell us when you first came to that conclusion?

A. I cannot. For the last several years we have been convinced that that was the safe duty of the system at the rate at which water has been used since that time.

Q. Did you come to that conclusion as far back as 1890?

A. I think not.

Q. As 1891?

A. I think not.

Q. As 1892?

A. I think not.

Q. As 1893?
A. It was in 1893 or 1894 probably.
Q. Who was president of your company in 1894?
A. Mr. Dwight Braman and Mr. B. P. Cheney.
Q. Was Mr. Cheney president of the company in 1894?
A. My recollection is that he was part of the year.
Q. The latter part of the year?
A. From April on my judgment is.
Q. Do you remember the report made by Mr. Dwight Braman dated March 30th, 1894, the report to the stockholders?
A. I remember there was such a report made, I do not remember what was reported.
Q. Do you not remember what was reported?
A. I do not recall now, no. I can identify the report if you have it there.
Q. Have you the report?
A. Not with me.
Q. Do you remember his stating in that report in substance that they had then 3,300 acres irrigated, which taxed the pipe
667 line to its full capacity and that it would be necessary to construct a 40-inch main in order to irrigate the other 6,700 acres of land lying under the system?
A. I do not remember that it said that. The report is here I believe and can be shown for itself,
Q. Mr. Boal, will you bring that report up, you say you had it at the office you think?
A. I will if I have it yes sir—the report for 1894?
Mr. SHAW: Yes, it is dated March 30th, 1894.
Q. How much land did the company own Mr. Boal at the time of the construction of this water system in Chula Vista, how many acres?
A. Mr. Savage, have you the statement there?
Q. You can approximate it.
Mr. WORKS: I think you can get all those matters from Mr. Savage better than you can from Mr. Boal. I think he can give you the exact figures if you want them.
Mr. SHAW: If the witness can give us an approximate estimate it will be sufficient. Can you Mr. Boal?
WITNESS: In the neighborhood of 4,000 acres.
Q. About 5,000 was it not?
A. I think about 4,000.
Q. How much have you in Sweetwater—I am speaking now of that under the system?
A. Why I will not attempt to answer that Mr. Shaw.
Q. How much have you in National City, or had you?
A. I would not attempt to answer that. We have those figures compiled.
Q. At the time this water system was constructed do you know to what extent improvements had been made, and settlement, at Chula Vista?

A. The system was constructed or finished about April
668 1888. Have you that time in mind?

Q. Yes, and prior to that time, from 1886, beginning with the beginning of the construction of the system?

A. My judgment is there were from five to eight houses on Chula Vista.

Q. There were no orchards there were they?

A. I remember that there was one orchard. There were two or three orchards I think down on National avenue that had been developed by means of wind-mills—Mr. Griffith's orchard and Mr. Baird—two orchards I think.

Q. How about the lands of the company in the Sweetwater valley were they developed or improved?

A. Not the lands owned by the company, there were other lands developed there.

Q. That is in the low grounds or wet lands they were improved?

A. Yes sir.

Q. What was the object of constructing this water plant by the company, or what prompted them to construct this plant?

A. To irrigate those lands and supply National City with water, as I understand it.

Q. To irrigate their own lands?

A. And others.

Q. And to supply National City with water?

A. As I understand it.

Q. At the time of its construction there had not been sufficient development to call for such a system or demand such a system, had there?

A. No there were but few orchards that needed irrigation.

Q. It was constructed for the purpose of enabling the company to dispose of its lands was it not?

A. Largely.

Q. And at that time was far in advance of the needs of that
669 vicinity?

A. It was not in advance of what any company would reasonably construct on lands owned by them.

Q. That is, in contemplation of selling those lands?

A. In contemplation of development or sale, either or both.

Q. That is, a company which owned dry lands of that kind would build a system which would irrigate all of those lands in view of disposing of them or developing them?

A. Yes.

Q. Now the Chula Vista lands were laid out in forty-acre blocks, and those subdivided into five-acre tracts were they?

A. They were.

Q. Are laterals laid to each of those five-acre tracts?

A. Yes sir, practically.

Q. About what proportion of those tracts are now improved and being irrigated?

A. Something near two-fifths of them I should say.

Q. Near two-fifths?

A. Yes sir, from two-fifths to one-half.

Q. So that about two-fifths of the laterals are now in use and three-fifths unused?

A. Not at all, those laterals are all in use. There is water taken from the end of every main we own on Chula Vista and to supply all the water on Chula Vista——

Q. But the lands which are being irrigated do not lie in one body.

Mr. WORKS: Let him answer the question please.

WITNESS: I was about to say that the heavy use of water that is now taken to irrigate land uses up the capacity of some of the mains, and to supply all of those lands along which the mains run an increased supply would have to be provided.

Q. An increased supply of mains?

A. Of water.

670 Q. Of water?

A. Yes sir.

Q. The lands which are now being irrigated do not lie in one body then but are scattered, are they not?

A. The development of Chula Vista is mainly in the north end and on the west of it. The unirrigated or undeveloped lands lie in a compact body at the south end of the tract.

Q. About how much is there of that undeveloped land in the south of Chula Vista in the compact tract that you speak of, about how many five-acre tracts?

A. From two to three hundred, I should say.

Q. Two to three hundred five-acre tracts?

A. Yes sir.

Q. And that is all piped is it not?

A. Yes.

Q. With laterals, and mains in each block?

A. Yes—there is a portion of it that is not piped along the southeast corner.

Q. What proportion of it is not piped?

A. Oh from fifty to seventy-five lots I should say.

Q. Was it originally piped?

A. It was.

Q. And the pipe was taken up?

A. It was.

Q. What was done with that pipe which was taken up?

A. Some of it was relaid and some of it was never used again, it was a part of the spiral pipe.

Q. The cost of laying that pipe, laying those laterals to these five-acre tracts is included in the original cost of your system?

A. It is.

Q. This spiral pipe you speak of as having taken up, the cost of laying that was about $56,000 was it not?

671 A. I do not recall the figures. I should say that was somewhere near.

Q. You include that in your original cost?

A. Yes.

Q. And in making your estimates of depreciation you charge up six per cent. annually on that pipe?

A. Yes sir.

Q. As a matter of business policy and assuming that the cost of that pipe was some $56,000 would it not be wise to dispose of that pipe—to trade it for a yellow dog, so to speak, and hire somebody to kill the dog?

A. We have made better use of it than to trade it for a yellow dog.

Q. That is by charging up to the consumers $3,000 a year for the depreciation of it?

A. No, for using it for road crossings and——

Q. For road crossings?

A. Yes sir.

Q. But the consumer is called upon for the six per cent. annually for depreciation?

A. Yes, if we ever got the six per cent. that would be so. We have never got that nor any of it.

Q. Do you know the number of acres irrigated in Chula Vista?

A. I do not.

Q. Do you know the number of acres irrigated in National City?

A. I do not.

Q. In the Sweetwater?

A. No.

Q. Is this reservoir susceptible of increase of duty by raising the dam?

A. Yes.

Q. To what extent can its capacity be increased by raising the dam?

A. The engineer has all those figures at hand, I have not.

672 Q. If it is a fact as you state that the present duty of this system is only about 6,000 acres, was it not bad policy and bad engineering to cover such a large territory by these pipes and pipe lines?

A. It probably would have been wise to have confined it to a less area.

Q. To the area which you could irrigate from the pipe system?

A. Yes.

Q. Now how far do your pipe lines extend on the north?

A. I do not know the distance.

Q. Do you know the distance from the south extremity of your pipe lines to the northernmost extremity of your pipe lines?

A. I do not.

Q. Have you any idea, can you not approximate it?

A. Yes sir.

Q. About how far?

A. About seven miles and a half.

Q. Seven miles and a half from north to south, and about the distance from the eastern extremity to the western?

A. About six miles.

Q. About 45 square miles that would be?

A. That does not follow at all, the irrigation field——

Q. That is you mean the pipes, the laterals do not cover all that territory?

A. The irrigation field lies west of the dam and the territory covered is not the square of the distance north and south multiplied by east and west.

Q. I understand, but you do cover a part of that territory with your pipe system?

A. Yes we do.

Q. You have never refused to furnish any one water on account of shortage have you Mr. Boal?

A. We have refused to furnish water on account of inability to deliver water.

673 Q. That was by reason of having no pipe line with which to conduct it to the lands upon which it was desired, was it not?

A. It might have been that reason at times, and it might have been because the use of water from mains lying near by would have reduced or impaired our capacity to supply other lands that were already irrigated.

Q. That is the duty of your pipe line, but you do not refer to the duty of your reservoir do you?

A. No.

Q. Then it was not a shortage of water?

A. No.

Q. Do you know about how often the dry years come in this country?

A. I do not, the engineer has all those figures.

Q. Assuming that the winter rains each year filled the reservoir, what number of acres would it irrigate, and assuming that the amount of water used per acre ranged from 250,000 to 350,000 gallons per acre?

A. It would increase the figures given you some time ago, it would somewhat more than double it, or about double it.

Q. It would more than double it, or about double it?

A. About double it.

Q. Would it not considerably more than double it Mr. Boal?

A. The number of gallons figured by me in that computation was from two billions to two and a half billions. The capacity of the reservoir is six billion, that would be the comparison.

Q. Have you any meters in use for measuring water to irrigators?

A. We have.

Q. How many about?

A. I do not recall the number, I think Mr. Savage has that information.

Q. Where are they located?

674 A. Mr. Savage can give you all that Mr. Shaw, I cannot tell you.

Q. You do not know what they show either?

A. No.

Q. Have you ever had occasion to reduce the supply of water to any of your customers on account of any shortage?

A. Not that I recall.

Q. Have you for any reason whatever?

A. Reduced the supply?

Q. Yes.

A. Not by reason of shortage of water, no.

Q. I asked you if you have for any reason?

A. No, we have some irrigators on the end of the pipe lines who find difficulty in getting as much water as they would like, but it is not a reduction on our part, it is because of their inability to get it by reason — elevation.

Q. On account of elevation?

A. Yes sir.

Q. Have they orchards?

A. They have.

Q. Do you know what proportion of water they get, that is what proportion of 350,000 gallons per acre they get?

A. No.

Q. Do you know how many inches in depth upon each acre, that is how many acre inches, is used upon land in irrigating, that is for one irrigation I mean?

A. We have made some measurements and I have been informed by the engineer that it ranged from two to four inches dependent upon the irrigator and his idea of what he requires.

Q. As a matter of fact in your judgment have not the people there used entirely too much water for the good of their orchards?

A. My judgment is that in a great many cases they have.

Q. And isn't it likely that in time even the people of Chula Vista will learn that it is detrimental to them and cease it?

675 A. I think so, it is something we are trying to educate them up to.

Q. And with such education the duty of the reservoir will be correspondingly increased, as knowledge and information advance down there?

A. I hope so.

Q. Now running this pipe line to the ex-mission lands, you received a bonus of $7000 or thereabouts did you not for that pipe line extended from the eastern and northern boundary of National City to the ex-mission lands?

A. As a matter of book-keeping we charged up the cost of laying that line, and charged each applicant a certain amount per acre, and credited it up against that account, so that in time that account was wiped out, adding nothing to the cost of our system.

Q. That is you added nothing to the cost of your system on account of the construction of that pipe line?

A. That was the result of that, yes sir.

Q. Well, this original cost of your system given in your schedules does not include the cost of that pipe line?

A. It does in this way, that pipe line was laid with a portion of the spiral pipe that was taken out. It was treated, and laid into the

ex-mission. The cost of that treatment and laying was charged up to ex-mission account. The pipe itself, the original cost of the pipe, is a part of the cost of the system, but the cost of laying it into the ex-mission resulted in no additional amount added to the cost of our system.

Q. Having been paid for by the people?

A. The cost of transference, yes, having been paid for by the people.

Q. Which amounted to about $7,000?

A. About $7,000.

Q. You did not include that in your water rentals?

676 A. It was not included in the water rentals.

Q. Now these amounts which you have received for water rights, have you included them in your water revenue for each year?

A. I have not.

Q. That is not included in your revenue for sales of water?

A. No.

Q. To what account do you carry that?

A. Water-right account.

Q. Prior to 1893 did you have a water-right account?

A. I gave you the years and the amounts received each in my testimony the other day. I will look it up for you again. In 1893 was the first water-right account that we have on our books.

Q. You opened the account that year?

A. Yes sir.

Q. Then prior to that time, and for the amounts received from the sale of lands with water and in any enhanced value of those lands which you have received, you made no separate account of it?

A. No.

Q. That was charged in your land account, land-sales account?

A. It was credited into our land account.

By Mr. HAINES:

Q. Mr. Boal, I want to ask you a question or two. Did I understand you correctly when I say that I did understand you to testify Saturday last that your company declines to furnish water to any lands not now under irrigation and not sold by your company, unless the owner of such land will enter into a water-right contract such as has been put on file here?

A. That is our present policy.

Q. And if such land-owner should refuse to enter into such a contract it is the policy of your company is it not to refuse to furnish water except as your company is compelled to do so by a lawsuit?

A. That has never been discussed between counsel and

677 myself and I should be governed by counsel's advice.

Q. Well is that the policy of the company, not to furnish water without a contract, unless it is compelled to?

A. As I say, if it were a matter of contest between the applicant

and the company, I should be guided by counsel's advice in the matter.

Q. But what is the policy of the company in that behalf?

A. I stated awhile ago that we exacted that contract.

Q. And that the company is not willing to furnish it except as compelled to do so, without a contract?

A. I do not know how I can answer it any more definitely than I have, that in the matter of contest counsel's advice should govern.

Q. What advice have you had from counsel, any on that subject?

A. The advice of counsel is that that is a perfectly proper transaction for us to carry out.

Q. That is to demand the contract as a condition to furnishing water?

A. Yes.

Q. Why doesn't your company accept Judge Ross's opinions in this matter and furnish water without executing an additional contract to pay for water rights?

A. As I understand it, because the decision Judge Ross has made as to that and other matters will be appealed to the supreme court, and some of those points may be reversed by that body, and we——

Q. Then the information of the company is in favor of a reversal of that part of his opinion, is it not?

A. Counsel can answer that better than I can.

Q. No, the information of your company I am asking for, and not the opinions of your counsel?

A. The records will show that we have contended for a water right.

678 Q. Now does your company before this board—in order to be fair to the board we desire this information—claim that the board should fix any different compensation to be paid for water to be furnished to outside lands not now under irrigation from what it should fix for lands already under irrigation?

A. In the first place I do not think we have made any claim to the board at all for fixing rates of any kind.

Q. I am not asking what you have claimed, but do you claim that the board ought to in fixing rates make any discrimination between lands not now under irrigation and those under irrigation?

A. I do not understand that we intend to make any such claim.

Q. Is your company contending that the board should fix the same compensation for the petitioners and others who want water for irrigation on raw land, as for the protestants who already have water for irrigation?

A. Now let me say as to the petitioners we think for the most part——

Q. They are all non-irrigators?

A. And outside of the irrigation field of our company.

Q. No, you are mistaken about that.

A. I think for the most part they are outside of the irrigation field.

Q. Speaking about the protestants and the general public who

may want water under your system, and have not yet water, is your company contending that the board should make the same rates and compensation for them precisely as it does for those who already have water on their land?

A. As I understand it, the board will make one rate as to all——

Q. That is not for us to say what the board will do, but is the company contending that they shall make one rate for all?

A. The question as to that has not been brought up at all by the company.

679 Q. Well it is a good time to say now while the matter is before the board—what does the company want before the board?

A. As we understand it, there is no such thing as a water right that we may legally charge for, and the company certainly is prepared to accept the decision of the board—what it makes as to that matter.

Q. Then if the board should make an ordinance providing that water should be furnished to raw lands at precisely the same figure that it shall continue to be furnished to irrigated lands, the company will be satisfied with that?

A. As I said, I have not had any conversation with the company——

Q. But is not this a good time to tell the board what the company insists upon in that behalf?

Mr. WORKS: He says he does not know. He says he has not consulted with any of the officers of the company and cannot tell anything about it. The board has to determine the rates. We are not claiming anything here, you are the claimants. We are not coming here asking anything from the board.

Mr. HAINES: That is very attenuated, saying that you do not care what the board does.

Mr. WORKS: I did not say we did not care what the board does. We expect the board to do just what the law says the board shall do, but we have not been making any claims to the board, and neither have you. These petitioners who are outside of the irrigation field of the company are asking something, and you are protesting against the board giving it.

Mr. HAINES: The position the company takes when it is here legally before the board and is represented by counsel, that they have nothing to say as to what they thing is right——

Mr. WORKS: We have not said any such thing as that.

Mr. HAINES: (Continuing.)—or what is desired by the company, or upon what lines rates are to be fixed, is certainly indefensible.

680 Mr. WORKS: We will claim that upon the argument, but as to what Mr. Boal's idea is, that has not anything to do with it.

Mr. HAINES: We want to know what the company wants?

Mr. WORKS: We are not asking anything here. What the board wants I presume is to get at the facts so they may determine what we are entitled to.

Mr. HAINES: That is just what we are trying to do.

Mr. WORKS: I do not think you are, you are trying to get at some claim or policy of the company that is totally immaterial to the board.

Q. Mr. Boal, does your company propose that if this board fixes a flat rate for irrigated and unirrigated lands, that is the same rate, that they will still exact from people who want water on unirrigated lands a contract of the kind in evidence here?

Mr. WORKS: We object to it as immaterial, irrelevant and incompetent. There ought to be some limit to an examination of this kind certainly. What the company may claim or what it may expect as to water rights is utterly immaterial. What I presume is competent here is to try to get all the facts out so that the board may determine what rates should be fixed. I have not been making objections, but this thing has gone on now so long it seems to me to be a pure waste of time.

Mr. HAINES: Well I insist upon the question.

WITNESS: In the first place it would be impossible for me to answer that. The policy of the company is determined for me to carry out, and that has not been determined.

Q. Well the policy of your company is not to furnish any water on outside land unless this contract is entered into, is it not?

A. That has been our policy up to now, yes sir.

Q. Will it have the same policy after the board fixes rates?

A. I cannot say as to that. I will be guided entirely by such instructions as I shall be given.

681 Q. Mr. Boal, I call your attention to section 5 of the law of 1885, and I read it: "In the regulation and control of such water rates for each"—I leave all out but the corporation—"for each of such corporations, such board of supervisors may establish different rates at which water may and shall be sold, rented, or distributed as the case may be"—May I ask what in your judgment is a reasonable price per acre to be fixed by the board here for water to be sold by your system?

A. We have always claimed a different rate for different uses.

Q. I am not talking about different uses, another section of the statute covers that. I am asking you what in your judgment is a reasonable rate per acre to be fixed by this board for water to be sold for irrigation?

A. I believe that a reasonable rate is what we have received in National City. That ranges from $3.50 to $7.00 an acre based upon water at two cents a thousand gallons.

Q. Bearing in mind here that the statute speaks of a different rate for a rental, will you state to the board what in your judgment is a reasonable price per acre for the rental of water for irrigation?

A. Well I do not exactly draw the distinction between the two kinds of water.

Q. I am not asking you what you draw, but I am asking you to answer, under what the statute draws.

A. I think it would seem to me that they must mean about the same thing.

Q. But I call your attention Mr. Boal to the fact that the statute speaks of the boards establishing different rates for these two different transactions, a sale and a rental.

A. I am perfectly willing to answer your question Mr. Haines, if I gather what that means. Will you tell me what it is to sell water and what it is to rent water.

682 Q. Does not your company have some idea about what the difference between the two is?

A. In either case the water passes away from us and is used by the person.

Q. Yes sir, and consumed is it not?

A. And consumed.

Q. When it is used for irrigation—now then the statute speaks of a different rate for each of those. What distinction do you make and does your company ask for before this board in case of water for rental than it does for the sale of water?

A. Since the water passes from us in both cases it seems to me that the prices we receive ought to be the same in both cases.

Q. If it is the same how can it be different, as the statute provides?

A. I do not know.

Mr. WORKS: The statute does not provide that it shall be different, it does not use it in that sense at all Mr. Haines.

Mr. HAINES: Judge is interpolating something into the law here.

Mr. WORKS: You are trying to get the law out of Mr. Boal. He is not a lawyer and cannot tell you what the law is, I suppose—he is not a lawyer.

Mr. HAINES: I do not care to be interrupted.

Q. The statute says that the board may—and I take it in this connection that that means shall—establish different rates at which the water shall be sold or rented or distributed as the case may be. Now I want to ask what in your judgment ought to be the price for a rental of water by the acre?

A. As I said, I cannot draw the distinction between the two; we are entitled to the same amount whether the water is sold or rented, because a rental as I understand it simply means the use for a time—it might mean that.

Q. And a sale means what?

683 A. And the sale means the passing away from you to somebody else. Now so far as water is concerned, it passes from us whether you call it rented or whether you call it sold, to the user, and he takes it and carries it away. We have no use of it beyond that as might be inferred from the term rent. The term rent might mean that it should come back to you at a certain time and be your property to dispose of again, but it is not so with water.

Q. Well if it is sold the absolute title to the right would pass?

A. To that water sold, yes sir.

Q. And if it is rented it is only leased, is that it?

A. That would be the distinction I would draw between sale and

lease, but you cannot apply those things to water. You cannot apply them to the water, you furnish it to a man to use.

Q. The statute applies it?

A. I do not know what the statute means——

Q. And the constitution applies it?

A. (Continuing.)—but that is what it seems to me might be meant by the two terms, but you cannot by any possible construction mean to say that if you rent water and furnish it to a man to irrigate his land with, that you retain any interest in it or any right or any ability to use that water again or to dispose of it.

Q. How would it do to apply your rule ten of your rates to this language—not your rule ten but section ten of that rate schedule?

A. That does not modify my understanding of the effect of delivering water to an irrigator. This is a rule that we contended for under our understanding of our right to collect a water right.

Q. Well suppose you construe this language as meaning a sale of a right to the use of water, and a rental as a right to use the
684 water from your system, would that harmonize the language according to the actual practical facts in the case? Then could you make different rates according to whether it was a sale or rental?

A. If we were to apply our old understanding of the right to collect a higher rate for one class of land over another, this rule might be a reasonable one to put into effect.

Q. It is really a distinction between the rights in your system, one an absolute ownership of the easement to the flow and use of water and the other just the rental of it, would not it be?

A. Well that is a construction that some people contend for, but it has not been accepted.

Q. Did not your company contend for that?

A. I do not know that they ever did. Some of the officers might have.

Q. Does not this rule contend for that?

A. Contend for what?

Q. For the difference between the compensation to be made to the company according as to whether the use of your system is bought or is rented?

A. That is a construction as I say, which can be put upon this, but whether the company really put that construction upon it or not I do not know, some of the officers might have.

Q. Is not that what the rule reads?

A. The rule reads that one class of land should pay a higher rate than another, but it does not say anything about whether one class of land has acquired a right of part ownership in the water system.

Q. It speaks about the lands to which the easement and flow of water has been annexed by voluntary act of the company, doesn't it?

A. Yes sir.

Q. That is what you call a water right isn't it?

685 A. Yes sir.

Q. Where they only get it without the consent of the

company, that is without a sale for it, it is a mere rental from year to year, they pay six per cent. on a hundred dollars for the rental?

A. For the water right.

Q. For the flow and use of water?

A. We have always called it the water right.

Q. Six per cent. for the use of the water right is it?

A. For the right, for the privilege of the use of the water on there.

Q. That is it?

A. Yes sir.

Q. Where they have not bought and paid for it in a lump sum, is that it?

A. Yes sir.

Q. Can you find as a practical man, as a manager of this company, any other construction of this language in section five of this act I spoke to you about?

A. It does not occur to me so now, I might be convinced that that is what it means in time, but it is certainly a new explanation about it.

Q. Can you find any other distinction between a sale and a rental for which the board is to fix different rates under law but that?

A. Well nothing occurs to me now. There might be other distinctions.

Q. There do not any occur to you now?

A. No.

Q. In section six of the act under which the board is acting, the act of 1885, there occurs this language which I will abbreviate in stating: "At any time after the establishment of such water rates by any board of supervisors in this State, the same may be established anew or abrogated in whole or in part by such board
686 to take effect not less than one year after such first establishment, but subject to such limitation of one year to take effect immediately in the following manner: Upon the written petition of inhabitants as hereinbefore provided, or upon the written petition of any of the persons, companies, associations, or corporations, the rates and compensations of whose appropriated water have already been fixed and regulated, and are still subject to such regulations by any board of supervisors of this State"—do you know as a practical man in charge of the water system, of any waters of your company which have once been subject to regulation and control by the board which are no longer subject to such regulation?

A. Do you refer to the seepage water in the bottom of the Sweetwater valley that has passed beyond our control?

A. No, water still under the control of your reservoir and pipe system?

A. I certainly do not know what you mean.

Q. I am asking you whether you know of anything in the facts that corresponds to what the statute speaks of. It speaks of waters that are still subject to regulation by the board, assuming that there are some waters that are no longer subject to regulation by the board. Do you know of any water under your system that is no longer subject to regulation by the board, as to prices?

A. As I understand it, all the water we have stored is subject either to the regulation of this board or the board of National City.

Q. You do not know of any waters that your company controls which pass beyond the regulation of one or the other of those boards?

A. Well I do not know that I have any very positive opinions on that subject at all. I have not studied the statute nor tried to understand what it meant.

Q. I will not ask you but a question or two more Mr. Boal.

687 Q. Do you know what was the reason or motive of the company in voluntarily furnishing water prior to 1893 to outside lands without asking payment for water rights?

A. I only know one thing, that the company up to that time had not adopted the policy of selling water rights. I think it was the idea of the management in early years that the amount of land was small that would call for water outside of ours.

Q. Was there any policy or desire on the part of the company to quicken the settlement and start the settlement of land under the system?

A. As to our own lands there certainly was a desire.

Q. Wasn't it so much the desire of the company that they were willing to furnish water to lands outside, in order to hasten settlement?

A. That might have been part of their consideration, but I know of no settled policy that was ever promulgated as to that.

Q. You only know the practice of the company in furnishing such water?

A. Yes.

Q. Under the classification of lands adopted by this rule ten to which I have been calling your attention, under which class of lands do all the lands of these protestants now fall, the first or second class?

A. So far as I know the protestants would all come under the first class.

Q. Mr. Boal, will you look at these receipts and state what they are for, what they were given for?

A. They were both given for water rents as stated in the receipts.

Q. For irrigation purposes?

A. For the purposes expressed under registry number 556 and 762½.

Q. You do not know what that is without referring to your books?

688 A. No, I think it can be determined.

Q. Do you think it is for irrigating purposes, or for all purposes?

A. I think it is for irrigation and for domestic use.

Q. What was charged per acre in these receipts, for the water used?

A. Without examining the books I should say $3.50 an acre.

Q. What is the date of these receipts?

A. One is dated 8/6/97, and the other is dated 8/7/97.

Q. That is August 6th, and 7th 1897, so that those are for irrigation, and the charge is $3.50 an acre. You have up to as late as August collected the $3.50 rate?

A. We have.

Q. Did you do that generally and with all?

A. We did it where it was understood as I am informed that the amount received was on account.

Q. Those receipts do not express that that sum was received on account, do they?

A. They do not.

Q. In all those cases did you receive money and give that class of receipts upon an understanding that it was on account, that is an oral understanding?

A. As I understand the matter, we were directed to supply water at the rate of $3.50 per acre by the Federal court until such time as another rate should be established, when the increased rate should be paid, if it was ever allowed us.

Q. That is, the Federal court said that the increase would be paid?

A. Well that was my understanding of it.

Q. That in their judgment or decree they provided that the consumer should pay that increased rate?

A. If I may be allowed to, I would like to have our counsel who is here state his advice to us upon that matter.

689 Q. Have you been accustomed to receiving money at the rate of $3.50 per acre for irrigation, and giving this class of receipts to all alike?

A. That is our regular receipt that we give.

Q. To any one who is now using water and who offers you the $3.50 per acre, you receive it and give them this class of receipt without other than the oral understanding, at least?

A. If money were offered us at the present time, I doubt if we would receive it this week for instance; I think we would let the matter remain open until some of the questions were settled.

Q. Have you declined to receive any water rentals tendered you at the rate of $3.50 per acre?

A. Yes.

Q. Why did you decline it?

A. Because the tender was coupled or accompanied with a demand that we acknowledge that receipt to be in full.

Q. Have you declined to receive any water rental where it was tendered without being coupled to a statement of the kind just referred to in your last answer?

A. I do not recall whether the treasurer's office has or not.

Q. You do not know whether they have or have not?

A. I do not, no.

Q. The rates thus far collected have not exceeded $3.50 per acre have they?

A. Not outside of National City except in some special cases where they use it for alfalfa or something of that sort.

Q. But for orchard land it has not?
A. No.

By Mr. TRIPPET:

Q. Mr. Boal, you are the general manager of the company?
A. Yes sir.
Q. What other officers have they here?
A. They have an assistant treasurer.
Q. Is that all?
690 A. They have the horticultural superintendent and chief engineer.
Q. Where does the board of directors meet?
A. The board of directors meets in Boston, I understand.
Q. Do any of them live in this State?
A. They do not.
Q. In this schedule of rates Mr. Haines called your attention to the fact that there are two classes recognized, in one class that they have paid something for the water right, either buying a water right or paying something in addition to the land for the water, the first class isn't it?
A. No not always, they have not always paid to belong in that class.
Q. They had not?
A. No.
Q. In some places you give it away?
A. In some places we annexed it without a payment of any sort.
Q. Do you recognize that the first class of water-consumers have in some way a right different, from the second class, to water?
A. We did, when we promulgated that.
Q. And in this promulgation, for the second class you have the same rates for water as in the first class, $7.00 an acre, but in the second class you add six per cent. of the value of the right of an easement for the flow of water for irrigation, which shall be valued at $100 per acre. That would be $6.00 in addition per acre for that class of consumers?
A. It would under that regulation.
Q. Now if that regulation was based upon the true rights of the water-consumers, would the rates now fixed by the board of supervisors for all consumers, disregarding the fact that some have bought a water right, be equal and uniform?
A. The rentals would be uniform, yes sir.
691 Q. Would they be equal, would the compensation paid by these people be equal and uniform?
A. The benefits to the company of course would be different than if the company had sold the land or had sold the water right.
Q. Can't you answer my question?
A. I have attempted to answer it. As I said, in the first case the rentals received would be equal, but the amount received by the company would be different than if it sold its lands to those applicants, or than if it received $100 an acre from those applicants.
Q. The amounts for water would be the same, but would not the

compensation paid for water by these consumers be different and not uniform?

A. There would be a difference between the man who paid us a hundred dollars and the man who did not of course.

Q. Then such an establishment of rates would not be equal and uniform?

A. It would not be the same as it would under that rule.

Q. Can't you answer my question? Have you got any opinion on that subject? Would they be equal and uniform?

A. They would be equal and uniform under our rights as we understand them now.

Q. That is that there is no such thing as the sale of a water right.

Q. But if there is such a thing as the sale of a water right and a lot of these consumers have bought and paid for a water right, then one rate established for all consumers would not be equal and uniform?

A. I think that follows very logically if there is such a thing as a water right.

Q. If the company has collected for a water right already and has been paid for that, it would not be equal and uniform even if the board of supervisors were to establish the same rate for dif-
692 ferent consumers, in that regard?

A. A man who has paid for a water right of course has paid that much more than one who has not.

Mr. TRIPPET: That is all.

By Mr. WORKS:

Q. Now if I understand Mr. Boal, this rule simply provides for the same rental to be charged against all parties, doesn't it?

A. It does.

Q. And provides that if a party has not paid in cash for the water right that he shall pay what is equivalent to six per cent. interest on that money to the company?

A. Yes sir.

Q. There is no difference made in the rental is there at all?

A. None at all.

Mr. WORKS: That is all.

H. N. SAVAGE, being duly sworn, testifies as follows.

By Mr. WORKS:

Q. What position do you hold with the San Diego Land and Town Company, Mr. Savage?

A. I am its chief engineer.

Q. What position did you hold with the old San Diego Land and Town Company.

A. I was its chief engineer.

Q. And what position under the receiver.

A. I was chief engineer.

Q. For how long have you been chief engineer of the system?

A. I was first employed by the company January 10, 1891.
Q. And have you been chief engineer ever since that time?
A. I have been with them constantly ever since that time?
Q. Do you know how these petitioners take their water from the company?
693 A. I do not think we have any applications for water use from any of the petitioners as individuals.
Q. How does the company furnish them with water Mr. Savage, in what way?
A. If I am correctly informed as to the petitioners, one of them is the wife of a water-taker under our water system.
Q. Which one is that?
A. Mrs. Sharpe.
Q. The petition is signed by Mary E. Sharpe, not by Mr. Sharpe, is she a regular taker from the system?
A. No sir, in answering your question I said that if I am correctly informed she is the wife of one of the water-takers from our system.
Q. Then the application is made in the name of Mr. Sharpe and not Mrs. Sharpe, is that what you mean?
A. Yes sir.
Q. Are any of the others of these petitioners applicants for water from the company at all?
A. I think one of them is one of the water committee of the town of Otay, which receives its domestic supply from our system.
Q. Well do you know whether any of the others get water from the company at all or not?
A. I do not know that they do.
Q. Has the company any accounts with any of them on its books, for water supplied, that you know of?
A. I do not think it has sir.
Q. Then with the exception of the one party who is a committee for the town of Otay as I understand you, none of these parties are interested in any way in securing water from the company?
A. I do not think any of the balance of them are water-takers.

Mr. HAINES: I suggest that that is not responsive to the question. Do you mean are now taking water, or do not want to take water Judge?

694 Mr. WORKS: I do not know anything about whether they want to or not Mr. Haines. They have not said whether they want to or not. They certainly are not water-takers at the present time. They do not have to be interested in the system I concede in order to sign the petition. I simply wanted to show what their relations to the company were.

Mr. HAINES: If that was all that is all right, but some of them do want water.

Mr. WORKS: I do not care whether they do or not. I do not care to take your word for it now. There is nothing before the board to that effect now.

Mr. HAINES: They might be interested here, and yet not be water-takers.

Q. The protestants who have filed a protest here Mr. Savage, how do they get water from the company generally speaking—there may be some of them getting it, I do not know.

A. Have you a list of their names?

Q. No, I have not.

Mr. HAINES: I will furnish that list. There are some two hundred of them. We may say generally that they are the defendants named in the last cross-petition or cross-complaint in the case of Ward against Lanning in the superior court, about two hundred people, I think that is the revised list of them, of the consumers.

Q. Well you may answer the question Mr. Savage as to how, generally speaking, they get their water?

A. They receive their water supply for irrigation, and mostly domestic from the Sweetwater system.

Q. Have they been applicants for the water by applications filed with the company?

A. They have been.

Q. I wish you would state to the board what number of acres of land have been purchased by these protestants from the water company, that are now being irrigated?

695 A. Seven hundred seventeen.

Q. How many acres of land has the company furnished water to for irrigation and that is now being irrigated, to outside parties who did not purchase from the company, and without the payment of any water right?

A. Nine hundred and seventy.

Q. Now how many acres of land are being irrigated where the parties have actually paid for a water right?

A. Including ex-mission, 694.

Q. Have any of the parties paid for a water right in ex-mission?

A. I understand as a matter of history that the majority of the water-takers in ex-mission paid a portion of the expenses of the pipe line, and since the original construction of that pipe line, that others have received water by a payment.

Q. Well then the total amount is six hundred and how many acres?

A. Ninety-four.

Q. Then give the board the total number of acres being irrigated of all three of those classes combined?

A. 2,381.

Q. And out of that 2,381 acres how many acres of the land has been supplied with water that never belonged to the company at all?

A. 1,664. I want to say that it is possible that a portion of those ex-mission lands were originally owned by the company, but the sale was before I came here and I have not had occasion to look that up, but I think that in any event it was distinct from any connection of sale.

Q. In any event it would only be a few acres I suppose?

A. I think but a few, and no connection with the water used at the time of sale.

696 Q. Now give the board the number of acres of land that are being irrigated at the present time by the company itself?

A. Outside of the city, 1,352 acres.

Q. I wish you would state generally to the board in what manner and by what means the water is carried to and supplied to the lands?

A. The water is taken from a storage reservoir where it was impounded behind a masonry dam, in wrought-iron steel pipes, plates rivited in the larger mains, of which there are two, the length of each being substantially 30,000 feet—29,600 feet each—the one first constructed being located in the Sweetwater valley and terminating at the intersection of Fourth avenue and E street in Chula Vista, then reducing in diameter from 30 inches to 24 inches, and continuing along E street west for one-half mile, thence diminishing in diameter to 18 inches and extending along E street west to National avenue one-half mile, and north on National avenue to a point in National City, 1000 feet north of H street. From this main there are a number of laterals of different diameters throughout the Sweetwater valley, the first one running into what is known as the Kimball extension, the next running up to land formerly owned by Mr. Whitney, the next running north across lands now owned by Nickerson and others; one extending north to Mr. Lonsby's, one south into the Sunnyside tract, one south to A. M. Jameson's, another one extending south to the Sweetwater Nursery Company's tract, and one formerly extending into Keen valley. This latter has been disconnected, or rather it has been changed, a portion of it taken up in the center and its extreme terminus connected with the 24-inch main. There are also laterals extending along the avenues of Chula Vista north and south, with cross-lines extending east and west at intervals of one mile each. The distribution system in National City originally laid commanded the sections that were being built upon and most likely to be built upon at the time the pipes were laid. There is an

697 extension of the mains first named extending from Eighth street northerly along National avenue to Division street, and thence easterly and northerly some two miles and a quarter into the ex-mission tract, with two extensions, one east and one west from its terminus. There is also a 24-inch main laid along the north side of the Sweetwater river, extending from the dam following the grade contour to National City, with two connections with the National City distribution system, and provision for a third.

Mr. SHAW: These lines represent the pipe lines? (Indicating on a map.)

WITNESS: Yes, these red lines represent the pipe lines as constructed.

Mr. HAINES: This was taken up here. (Indicating.)

WITNESS: I will show you exactly what was taken up. As originally constructed the location of pipe line No. 1 is as I am indicating. (Indicates.) The red very properly was used to denote spiral pipe—red being known as a danger signal in our business.

Mr. SHAW: Now up here these represent pipes, and there are no pipes except where they are indicated by these red lines as I understand it on this (blue print) map.

WITNESS: Not of any special importance. There are two or three mains three or four inches in diameter that we have since laid as a matter of securing land sales.

Mr. SHAW: That is all.

By Mr. WORKS:

Q. What was the occasion for constructing this second large pipe line from the dam down?

A. To increase the water supply.

Q. Was that necessary to be constructed in order to supply the water needed?

A. Its construction was imperative to supply the water we had contracted to supply before its construction.

698 Q. That if I understand supplies water inside of National City in part, and also lands outside of National City?

A. The pipe system is connected throughout, and water may be supplied to the entire system and the entire length of either main from either outlet at the dam, enabling us to cut out either main pipe for temporary repairs without cutting off the water supply from the takers.

Q. Is there any part of this pipe system that is not now in actual use?

A. There is none of it that is not in actual use at this time.

Q. Is there any part of the system that is not now needed for use in supplying water for consumers?

A. There is not.

Q. When was this pipe line No. 2 constructed?

A. Its construction was begun December 12th, 1894, and first put into operation in July, 1895.

Q. Who has had charge of the distribution of the water to consumers and overseeing the use and supply of water since you have been the engineer of the company?

A. Previous to the summer of 1893 after the system was first constructed, I am informed that Mr. Schuyler personally supervised in a general way the foremen and others who were operating the system. After my coming here I had more or less to do with the work in an advisory way up to the summer of 1893, since which time I have had responsible charge of the work.

Q. Have you made any measurements of water in the reservoir in order to determine what the duty or capacity of the reservoir is in the supply of water?

A. I have had complete records kept at the reservoir since being with the company, the more important ones being observed and recorded by myself during the floods.

Q. Without going into those measurements in detail, I wish you would state to the board what is the available capacity of the
699 reservoir and dam for the supply of water to consumers?

A. The probable supply of water available every year is two billion to two billion and a half gallons.

Q. Well is it safe to rely upon the dam supplying a greater quantity of water than that?

A. With the present condition of the dam and our ownership of lands necessary for flowage, it is not safe to rely on that for a sure supply beyond that.

Q. What would be necessary in order to enable the company to supply a larger quantity of water?

A. It would be necessary to purchase additional storage lands and probably construct additional main conduits.

Q. Then in order to supply an additional quantity of water the company would have to go to an additional expense?

A. They would.

Q. Have you made any effort to arrive at the quantity of water that is used by consumers per acre?

A. I have made very careful observations and computations, as near it as it was possible to make throughout the time I have been connected with the company, with the actual quantity of water lost from the reservoir by evaporation and distribution.

Q. What has been the result of those investigations and computations as to the quantity of water being used per acre on an average?

A. The average use has probably been about 450,000 gallons per acre.

Q. Is there any kind of uniformity in the use of the water, and if not, what is the probable range of use from the smallest to the highest quantity used?

A. There is no uniformity in the use of water, the range being very great, depending on the personality of the irrigator and also on the land being irrigated. The actual measured use varies
700 from in the vicinity of nine inches in several cases, nine inches actual measured depth of water on the land to in one case 6 feet, with three feet being very frequently used.

Q. What have you noticed with reference to the quantity of water used for the irrigation of trees?

A. The water used for the irrigation of trees has varied with the irrigators from one irrigation to eleven irrigations in twelve consecutive months.

Q. In quantity?

A. In quantity the variation has been as great as the number of irrigations, from three inches to three or more feet.

Q. What in your judgment would be a reasonable quantity of water to use in an ordinary year for the irrigation of trees such as are grown there, citrus trees?

A. The requirements of trees is yet an unsolved problem, it is probable that they will require in the vicinity of an acre foot, more or less, depending on age and conditions, and of course rainfall.

Q. Well I understand an acre foot represents 326,000 gallons?

A. It does, 12 inches in depth of the water to the land.

Q. That is to say an acre foot of water would be equivalent to rainfall of one foot during the year?

A. Yes sir.

Q. Now under your system and manner of furnishing water, is

the consumer confined to any particular time for the use of that particular water where he is entitled to an acre foot, or may he use it at any time he sees proper?

A. There have never been any restrictions placed upon the taking of water for necessary use, except the division of time between the lower lands and higher lands receiving their supply from the same main, and there have never been any limitations as to the quantity of water they might take and actually use.

Q. Something has been said here about the supplying of water for purposes of irrigation through open ditches. What advantages
701 are there to the consumer if any in the supply of water by inclosed pipes as you are furnishing them over the open ditches?

A. The usual practice in open ditches is a distribution of time, water-takers taking their supply at stated intervals for consecutive hours, receiving their entire supply at intervals of a few weeks, while with our system we deliver constant pressure and the water-taker having the water under it at his option, using it during the day and closing it off at night if he likes to do so, having it for the spraying of his trees, as many use it. The water-takers who have lived under different systems have taken occasion to inform me that they appreciate this very highly.

Q. What are about the ages of the orchards that are growing in Chula Vista and other sections under the system at the present time?

A. The first orchards planted out since the construction of the system will be ten years old next spring, and the majority of them will probably average four or five years or a little less.

Q. From your knowledge and experience what quantity of water would be reasonably sufficient to irrigate the trees that have arrived at the age of ten years?

A. Judging from the use at the present time my judgment is they are using somewhat more than 350,000 gallons per acre. Whether this amount is actually necessary, or even a little more, I am unable to say at this time, but that requirement is largely governed by the rainfall of the season.

Q. Coming back to these pipe lines again, how far apart are those laterals placed?

A. In Chula Vista as originally constructed they are one-fourth mile apart, extending north and south along the avenues, and extending east and west they are one mile apart east of National avenue, and one-half mile apart west of National avenue. In National City——

Q. Well *is it* not necessary to go into National City. Are any of those laterals supplying water to the lands of the company
702 alone at the present time, or do they furnish the lands of the company and to other consumers as well?

A. Water is supplied to all consumers alike from all of them.

Q. Perhaps you do not quite catch my question. Is there any one of them that is supplying water to the company's land alone?

A. None of the main laterals are.

Q. What is the size of the main laterals?

A. All sizes down to six inches inclusive, except two or three west of National avenue. From these the company is taking the entire supply, but they are only a quarter to a half mile in length each.

Mr. WORKS: You may take the witness.

By Mr. SHAW—Cross-examination:

Q. To what extent has the company's lands used the laterals exclusively?

A. At the present time the company are using exclusively not to exceed two lateral pipes 6 inches in diameter extending from National avenue west, one of them 2200 feet in length, and the other one something less than 1600 feet.

Q. Why is it that the laterals east of National avenue and those west of National avenue are laid in different distances apart?

A. The laterals east of National avenue were laid through land and to land owned jointly by the company and others while the laterals west of National avenue were laid through land owned exclusively by the company.

Q. Those west of National avenue are one-half mile apart?

A. Yes sir.

Q. And those east one mile apart?

A. Yes sir, the east and west lines, east are one mile apart but the north and south lines east of National avenue are one-quarter mile apart, but the east and west lines are main feed-lines.

703 Q. Are they larger than those laterals west of National avenue?

A. They are, yes sir. East of National avenue they are 12 inches and 8 inches in diameter.

Q. And west of National avenue?

A. They are six only.

Q. You say that ten-year-old trees use at this time something more than 350,000 gallons of water per acre?

A. In my judgment they do.

Q. How have you arrived at that estimate, by what system of calculation or computation?

A. By measuring with meters the water supplied to lands, and noting the number of irrigations and quantity used, and the number of irrigations usually taken for the older orchards.

Q. What ten-year-old orchards have you placed a meter upon?

A. Not any.

Q. What age orchards have you used a meter upon?

A. We have meters upon orchards mostly four and five years of age, as I recollect.

Q. How much water do those orchards use?

A. Varying quantities depending upon the irrigator.

Q. Have you any slips there giving the name of the irrigator

A. Yes sir, Walter Price——

Q. How old is his orchard?

A. His orchard is probably five years of age.

Q. Oranges or lemons?

A. He had lemons in front, peaches and lemons in the rear, on a portion of his five-acre tract, and some—very little—garden truck.

Q. That is between the rows?

A. Yes sir.

Q. Melons?

A. Yes sir.

704 Q. Vegetables?

A. No vegetables, very few melons.

Q. What was the condition of the soil?

A. The condition of the soil was a sandy loam similar to lands of the company that were being irrigated, not to exceed three times.

Q. How much water did he use?

A. He used 407,815 gallons per acre.

Q. How many times per year did he irrigate?

A. From the best information I could get from himself and others it was equivalent to five or six; he irrigates mostly at night and very constantly.

Q. Excessively does he not?

A. He has the reputation of being one of the smallest irrigators in the tract.

Q. The company has similar lands to those of Price's?

A. Yes sir.

Q. The same age orchard?

A. Not that we have any meters on, no sir.

Q. Have you any meters on the company's lands?

A. Not with complete records, we have some on that we will have irrigation records of in a few days.

Q. You have no complete records of company lands?

A. No sir.

Q. Have you partial records?

A. Yes sir.

Q. How many times do you irrigate the company lands, five-year-old orchards, and soil similar to this of Price's?

A. Probably four on an average.

Q. Have you any meter measurements showing the amount of water used at those irrigations?

A. As stated before we have no meters on company orchards the same age as Price's.

Q. Well what age orchards have you meters on?

705 A. We have meters on orchards three and two years old.

Q. What quantity of water do you use at an irrigation on those orchards?

A. The records have not been compiled, as they are not complete until the irrigation season is over.

Q. You do not figure on that amount used at a single irrigation or take the record at all?

A. We take the records once a month and compute them at the end of the year. The probable use of water on company orchards is between two and four inches in depth for irrigation, depending on soil and condition of soil, the oldest orchards, probably four years old, that we have a meter on, required four inches in depth as used

for the first irrigation, the orchard having been plowed early in the spring.

Q. Now your five-year-old orchards on land similar to that of Mr. Price's what is the probable amount of water used in irrigating those orchards?

A. Something less than an acre foot with average years.

Q. Have you any idea how much less?

A. My judgment would be between nine inches and an acre foot.

Q. Nine inches would be how many gallons?

A. Approximately 242,000.

Q. How do those orchards look, those five-year-old orchards, on land where the conditions are similar to that of Walter Price, as compared with his orchard?

A. Walter Price's orchard is one of the best orchards in appearance under the Sweetwater system. The company orchards compare reasonably well.

Q. With his orchard?

A. Yes sir.

Q. Has the company's orchard had the same attention in the way of cultivation that his orchard has had—spraying?

A. They have had a very different attention. His has
706 been a continual care, and with all of his selling vegetables he has had a habit of hauling home a load of fertilizer.

Q. Then is the difference in the two orchards and the fact that his looks somewhat better than the company's orchards, due to the extraordinary attention given it, in your judgment, or due to the additional water which he uses?

A. It is due to difference in attention and soil with possibly a difference due to the kind of tree and treatment of tree before he had it.

Q. This nine inches to twelve inches which is used on the company's five-year-old orchards, is in your judgment ample for irrigation in ordinary and average years?

A. It is sir.

Q. So that in your judgment Walter Price uses an excessive and unreasonable and unnecessary amount of water for irrigation of trees, does he not?

A. Not necessarily, because of the difference of his soil being somewhat more sandy than the adjoining, and the growth of his trees shows that they have had reasonably good attention.

Q. You stated that the soil was similar to that of the company's lands while ago.

A. It is similar but more sandy in his individual case.

Q. In his case the soil on his orchard is more sandy than the average soil of Chula Vista, is it not?

A. It is, yes sir.

Q. That is an exceptional tract as compared with anything east of National avenue isn't it?

A. It has been exceptional in his little use of water and it is exceptional in its condition.

Q. Exceptional how?

A. In the little use of water.
Q. In the small quantity of water used?
A. Yes sir.
707 Q. Did I understand you to say that Walter Price used more water than others did?
A. Walter Price this last year has used more water by measurement than have our company, but previous to that he has been one of the smaller users of water under the system.
Q. The records which you gave me were for the present year were they not?
A. For the last year.
Q. Was that when he was using less water than others under the system?
A. That was when he was using he claimed more.
Q. He claimed more?
A. Yes sir.
Q. He was raising vegetables and hauling them away and selling them was he not?
A. He was raising very few vegetables.
Q. Now then Mr. Savage, as I understand you, you have selected a record showing the largest use of water for last year?
A. No sir, I picked out the first record that became apparent.
Q. That is for irrigation of trees I am referring to now.
A. Yes sir, the first record that I brought up.
Q. Are you acquainted with Mr. Hannah's orchard at Sunnyside?
A. I am, yes sir.
Q. Do you know the age of his trees?
A. I judge them to be fifteen years of age more or less, they were planted long before the system was constructed.
Q. Have you any idea how much water he uses on that orchard?
A. I have.
Q. How much does he use in your judgment?
A. I should judge from 18 inches up.
Q. Up how high, six feet?
A. No I do not think more than two feet.
Q. From 18 inches to two feet say on that orchard?
A. Yes, that would be my judgment.
708 Q. How does he irrigate that orchard, in basins?
A. He does.
Q. And covering the entire surface of the ground you think he uses in the irrigation season from 18 inches to two feet of water?
A. That w-uld be my judgment. A portion of the orchard is not irrigated in basins.
Q. Has he a meter?
Q. He has not.
Q. How do you arrive at your conclusion?
A. By driving through his orchard in the execution of my duties and seeing water running at very frequent intervals.
Q. How often do you drive through his orchard and see the water running?

A. I drive through his orchard usually once a week, and frequently more.

Q. Is he always irrigating when you drive through?

A. He is not, but irrigation is practiced very extensively on the orchard and it is a frequent thing to see green mould on top of some of the soil, which indicates pretty excessive use.

Q. You would not have the board to understand that you claim to be anywhere nearly accurate in an estimate made in that way would you?

Q. I would have the board believe that it was reasonably good judgment.

Q. Do you think he uses water excessively?

A. I think he uses more than is beneficial, yes, sir.

Q. Do you know the distance apart of the trees?

A. I do not recall, they are somewhat near together.

Q. What is the distance that the trees are set apart in Mr. Price's orchard?

A. They are at varying distances.

Q. Do you know the number of trees per acre?

709 A. No I do not in his orchard.

Q. Do you know whether it is greater or less than that of the company's orchards?

A. I should say it was a little greater.

A. A greater number?

A Yes sir.

Q. The quantity of water would vary would it not in accordance with the number of trees per acre, that covered an acre?

A. The quantity of water required would vary with the number of trees.

Q. Until such time as the trees got age and shaded the ground would they not?

A. When they shaded the ground the evaporation would be less.

Q. Mr. Savage, are you through irrigating the company's lands?

A. We probably are about through, depending on the conditions in the rainfall.

Q. Are you through irrigating any of the orchards at this time?

A. Yes sir, we are through irrigating a large number of them.

Q. Which have meters?

A. Not any of them which have meters for certain. I was over the company's orchard yesterday in anticipation of this inquiry—or last week rather—and they had not completed surely the irrigation of the orchards.

Q. What quantity of water in your judgment is used upon the younger orchards of the company, those two and three year old orchards?

A. That would be a varying less quantity with the age; the company's custom is to irrigate yearling trees four times, one furrow each side of each row of trees, and to irrigate two-year-old trees three or four times, using one furrow each side of each row at one irrigation and two furrows each side of each row the alternate irrigations, and three-year-old trees have practically the same treatment.

Q. About what quantity of water in acre inches is used in those orchards in your judgment?

710 A. Two and three year old trees have been receiving in the neighborhood of six inches in depth of water per year.

Q. And four-year-old trees about nine inches in depth of water?

A. Probably.

Q. And nearly all of the orchards are four and five year old orchards in Chula Vista are they not?

A. The average age of all orchards in Chula Vista is probably four years or a little less. The company's orchards will average somewhat less, as the majority of our planting has been done in recent years.

Q. In your judgment does the company use all the water that is necessary in the irrigation of their orchards?

A. I think they do.

Q. Does not the quantity of water necessary in irrigating orchards depend upon the cultivation given the trees?

A. We consider it so.

Q. The more cultivation that is given the land the less water that is required, is it not true?

A. We so consider it.

Mr. SHAW: That has been my experience as a rancher.

Q. Now you say that this system has a number of advantages over an open-ditch system, among others is that you receive the water under pressure, and that you can spray your trees?

A. Yes sir.

Q. Is that spraying of trees general in Chula Vista or exceptional?

A. It is exceptional but it is used to a certain extent.

Q. Is water under pressure any great advantage in irrigating lands located and laying as the Chula Vista lands are?

A. It is considered of great advantage by reason of having water that may be conducted to the different elevations in the land reasonably.

711 Q. The land as a rule lies upon a gentle slope does it not?

A. As a rule it does, but it is usually somewhat broken.

Q. It could be conducted through ditches though could it not, very easily, and flumes?

A. We have never been able to convince ourselves that we could change this system of delivery to the open-ditch system without having to purchase practically every acre of land in Chula Vista. We would like to be able to do so.

Q. That is due however to legal obstacles is it not?

A. It is not, it is due to the advantage of having water under pressure for irrigation purposes and to be delivered so that it may be taken over their land as they may like it, under pressure.

Q. That is, that you are in contract bound to do that?

A. It is because they claim that it is of great advantage to them to have it in its present condition.

Q. Suppose you saw fit to change the present condition and fur-

nish them the same quantity of water in an open ditch, why would you have to purchase the land in order to bring about that change?

A. Because the ditch water would not be considered anywhere near as valuable delivered without pressure as it is with pressure by the water-takers, according to their statements to me.

Q. As I stated before, you feel that you are under legal obligations to deliver it under pressure to the people who have bought the land and water?

A. We feel that we have obligated ourselves to deliver water under pressure, and that the water-taker because of the value of having it under pressure would not consider water that was not under pressure.

Q. Well it is then due to questions of law?

A. It is due to pressure and the value of pressure, as I understand from the water-takers' statements.

712 Q. Have you consulted lawyers with reference to it?

A. We have not.

Q. Have you consulted the people about furnishing them water through ditches?

A. We have, or I have personally had conversation with a great many of the people as to the desirability of water under pressure to be received by them at any time they chose to take it, or to be delivered through ditches at reasonable irrigation intervals.

Q. Then as I understand you, by reason of the fact that you have heretofore furnished water to those people under pressure continuously, you feel that you are in duty bound and under legal obligation to continue to do so?

A. That is my understanding of the feelings between the water-takers and the local management.

Q. Do you also understand that you are under legal obligation to furnish water to these people at $3.50 per acre because you have furnished it to them since the pipe line and system was completed?

A. I do not understand anything about our legal obligations.

Q. You do not understand anything about your legal obligation?

A. No sir.

Mr. SHAW: I do not believe that you do either.

Q. Now you say that under your system there are no restrictions except as to division of time?

A. On the few levels where it is imperative to supply all the low lands at one time and all the high lands at one time, thereby giving each a uniform and satisfactory service.

Q. There is no limitation as to the quantity of water that a water-consumer may use?

A. That he may use legitimately.

Q. What do you mean by legitimately?

713 A. For the irrigation of land in place of the road and attempting to fill the bay.

Q. You object to that?

A. I have objected in the past.

Q. And you have assumed the right to control the use of water where you thought it was being allowed to run to waste?

A. We have, yes sir.

Q. Do you assume the right to make any regulations with reference to the use of water that you deem reasonable and necessary?

A. We assume the right and consider it an obligation.

Q. To do that?

A. To do that.

Q. That being the case, where water is used six feet on an acre of land have you not the right to restrict the use of that water, upon the ground that it is an unnecessary and wasteful use of the water?

A. I think we might exercise such a right.

Q. Now, if you passed regulations with reference to the use of water restricting it to a reasonable use of the water, say such use as you give the company's lands, which you claim is sufficient and ample, would it not greatly increase the duty and capacity of your system?

A. It would not without great expense to us in the purchase of meters to measure the water and make it an object to irrigators' pocketbooks to decrease their use.

Q. Is there not any means of measuring water by the inch, flowing from pipes?

A. There is no known reasonably accurate way of measuring water from pressure pipes under varying pressures, except by the use of expensive meters.

Q. The meter is the only device whereby you can measure water flowing from pipes?

A. With varying pressures, according to the best of our
714 information, and we are very much interested in that subject.

Q. Are there any measuring apparatus used for measuring water which comes from pipe systems?

A. We have none in our system, except standard water meters.

Q. Are there any in use anywhere? Is there such a device?

A. I do not know of such a device that is a success.

Q. The water could be measured by allowing a hydrant to be opened for a certain number of hours or days?

A. No sir, not with any approximate degree of accuracy, because of the varying pressures throughout the system by reason of the water being under pressure, and the water-takers as a rule use the majority of their water in the daytime, and then close it off during the night, and the pressure increases.

Q. You could measure it and limit the use of water to a reasonable amount by the use of meters?

A. We can, yes sir.

Q. Why do you use the meters which you have?

A. The majority of meters which we have were placed on the China gardens to prevent this six-feet use before testified to, and those that you have been inquiring about on the orchards have been placed at

my own discretion to determine the probable quantity of water being used from the system by different irrigators.

Q. How many meters have you in use?

A. We have a total of something over a hundred, the majority of which are on small domestic services throughout National City, and of the twenty-five irrigating meters that we have the majority of those are on China-garden services in actual use.

Q. Are there not a great many consumers of water and irrigators owning orchards who do not use a quantity of water for irrigation in excess of that used by the company?

A. There are a number of irrigators whose land on accout of its high elevation are unable to get more water than the com-
715 pany uses. Some of them are using much less, but the majority of water-takers whose land is so situated that they can get water, use full more than the company.

Q. What proportion of the water-takers who can get water use more water than the company?

A. Probably more than seventy-five per cent. of them.

Q. Use more than the company?

A. Yes sir, under similar conditions.

Q. Is that proportion increasing or decreasing?

A. It is decreasing.

Q. The people are learning that the use of water to excess is detrimental to the orchards rather than a benefit are they not?

A. That is the conclusion they are reaching.

Q. What is your observation with reference to the quantity of water required where large areas are being irrigated, that is large areas adjoining, are being irrigated?

A. *M.* It depends entirely upon the nature of the soil and the location of the land being irrigated.

Q. I refer to the lands in Chula Vista.

A. There seems to be practically no change in the actual requirement of water in Chula Vista by reason of large areas being irrigated.

Mr. SHAW: Mr. Chairman, it is about five o'clock, and I think we might as well adjourn.

Pending the further hearing of this matter, the board adjourns until Wednesday, October 13th, at 9 o'clock a. m.

716 WEDNESDAY, *October 13th*, 1897—9 a. m.

After a discussion between the board and counsel regarding the necessity of continuing to introduce such large quantities of testimony, and the expense of transcribing the same, the hearing is resumed.

H. N. SAVAGE, recalled, testifies.

By Mr. SHAW:

Q. Mr. Savage, you stated that the irrigations of orchards varied from one to eleven per year did you not?

A. Yes sir.
Q. How many irrigate their orchards eleven times a year?
A. Very few probably.
Q. Those who do are regarded as cranks are they not?
A. They are sir.
Q. What is the average number of irrigations per year?
A. The average number of irrigations is probably between three and six.
Q. Three and six per year?
A. Yes sir.
Q. Whilst my relations with Judge Haines are friendly, at the same time if the interests of my clients conflict with those friendly relations, I have got to refuse to be governed by them. I would ask you the names of the persons who irrigate their orchards eleven times per year.
A. I am informed that Judge Haines is one of the irrigators who in one year irrigated his orchard eleven times.
Q. What year was that?
A. I think the year 1895.
Q. Are there any others?
717 A. There are a number of others who use a great many irrigations. I think Walter Price has turned water on his orchard nearly that number of times.
Q. Those are all exceptional cases are they not?
A. They are.
Q. And done in the way of experimenting?
A. They probably are.
Q. And in the interest and along the same lines that you people are working, to educate the people down there as to the use of water?
A. Yes, for educational and experimental purposes no doubt.
Q. Now you say that the quantity of water used varies from nine inches to three feet and in one case six feet?
A. Yes sir.
Q. Do you know the name of the Chinaman who used six feet of water?
A. I do.
Q. It was a Chinaman?
A. Yes sir.
Q. And not an orchard?
A. Not an orchard.
Q. And a very exceptional case?
A. A very exceptional case.
Q. Was the water paid for by the thousand gallons at meter rates?
A. It was not, the meter had been placed as a detective.
Q. Do you charge meter rates to the Chinaman?
A. We have been charging meter rates since we found the excessive use they made of the water.
Q. And you encourage them in using all the water they will, do you not?

A. We do not sir, we discourage the unnecessary use of water.

Q. Even where they pay for it at meter rates?

718 A. Even where they pay for it.

Q. How many people use three feet of water on their orchards?

A. Very few people use that quantity. The three feet of water referred to was for bottom lands, alfalfa, gardens, and so forth.

Q. And not for orchard lands?

A. Not for orchard lands.

Q. And nearly all of your lands upon which water is used are orchard lands are they not?

A. The majority of them are.

Q. Do you know Major Earle's orchard?

A. I do sir.

Q. What age orchard is it?

A. It was planted in the main before I came to this section and I am unable to tell the age. I should judge though from eight to twelve years.

Q. How much water does he use in your judgment in irrigating his orchard?

A. In my judgment he uses probably about 350,000 gallons per acre per year.

Q. Do you know how often he irrigates?

A. I do not.

Q. Do you see the orchard frequently?

A. I do sir.

Q. When he is irrigating?

A. Yes sir.

Q. Do you notice the head of water that he turns on?

A. I have noticed the head of water he turned on.

Q. About how many inches does he use at a time, that is what flow in inches?

A. There is no inch measurement made in our system.

Q. Well in your judgment?

719 A. I have no opinion as to inches flow from pipes of varying pressures, as he would take his.

Q. But you have an opinion in gallons as he would take his?

A. Yes, that his orchard in general, as it has been irrigated, according to my judgment would receive in the vicinity of 350,000 gallons per acre per year.

Q. Do you know how often he irrigates?

A. I do not.

Q. Do you know how many days he runs the water upon his orchard?

A. I do not.

Q. How many acres has he in his orchard, about ten acres hasn't he?

A. Yes, about ten acres.

Q. The reservoir supply available every year is from two to two and a half billion gallons. In that estimate you gave the water

which is actually available for use in irrigation and domestic purposes, did you?

A. Yes sir.

Q. And that is upon the assumption that we only have rain every two years, is it not?

A. No sir, that is based upon the rains that we have had for a series of years.

Q. For what series or number of years is that based upon?

A. It is based on observations of actual measured catchment since 1887, and by interpolation of rainfall records and probable and very reliable estimates, for some forty-eight or forty-nine years past.

Q. Do you take the rainfall or catchment for each year since 1887 to 1897 or for a period of about ten years, and base your estimate of two billion or two and a half billion gallons upon that?

A. That has been our basis.

Q. In other words, the catchment of that reservoir and the water flowing from the water-shed for ten years affords only that quantity of water for irrigation during that time?

720 A. That is all the water that it affords during that time.

Q. Have you any data showing the rainfall for the last twenty years?

A. I have sir.

Q. Going back to 1877—during that time how many dry years have we had?

A. I have the rainfall record going back not only to 1877 but to 1850.

Q. Well, take 1877, take twenty years.

A. In order to answer your question we will have to assume some quantity of rainfall as a dry year, for example——

Q. Well assume the catchment of the reservoir for a dry year, the catchment you state, was about 350,000,000 gallons?

A. Yes, that is the dryest year since——

Q. Now taking that as a minimum, give us the probable catchment for the next dry year, that year was what, 1894–'5?

A. The catchment does not vary directly with the rainfall in quantity, because of the rainfall being unequally distributed over the winter. The rain season of 1895–'6 at the Sweetwater dam was 7.27 inches, and that yielded us approximately one-third of a billion gallons only.

Q. That is 333,000,000 gallons?

A. 350,000,000 gallons exactly in the computations.

Q. Then it was over a third of a billion gallons?

A. Yes sir, slightly over.

Q. You stated it yielded you one-third of a billion only?

A. Approximately one-third of a billion gallons, was the language, I think.

Q. Then what was the next dryest year?

A. The next dryest year yielded us 450,000,000 gallons.

Q. What year was it?

A. 1893–'4.

Q. What was the rainfall?

721 A. The rainfall at the Sweetwater dam was 6.19 inches.

Q. When was the next dryest year?

A. The next dryest year within the time since records were kept at the dam was 1891–'2.

Q. What was the catchment that year?

A. The catchment was two billion gallons, and a rainfall of 9.9 inches.

Q. When was the next dryest year?

A. The next dryest year was 1887–'8.

Q. What was the catchment that year?

A. The catchment was 2,300,000,000 gallons.

Q. What was the rainfall?

A. The rainfall was 8.34 inches.

Q. When was the next dryest year?

A. The next dryest year was 1892–'3.

Q. What was the catchment?

A. The catchment was 5,200,000,000 gallons.

Q. And the rainfall?

A. The rainfall was 11.62 inches.

Q. There have been no years in a period of twenty except those you have given us where the catchment of the reservoir was less or would be less than five billion gallons have there?

A. There have, yes sir. There have been one, two, three, four years in addition to the ones already testified to.

Q. Well, give me the dry years during the period of twenty years is what I want to get at—I thought you gave me those in their order.

A. I gave those for the actual observations at the reservoir, and now I am giving the twenty years probable yield. Going back in years 1886–'7 the possible catchment was approximately 3,400,000,000 gallons.

Q. What was the rainfall?

722 A. The rainfall at the Sweetwater dam was 10.12 inches; in 1884–'5 the probable approximate catchment would have been 3,600,000,000 gallons, with a rainfall of 10.47 inches; in 1882–'3, the catchment would probably have been less than 500,000,000 gallons, the rainfall being 6.72 inches; in 1881–'2 according to this year's yield, the catchment would have been approximately 2,000,000,000 gallons, the rainfall 11.31 inches, the catchment and rainfall for the preceding year, 1880–'1 being approximately the same. The probable catchment for 1888–'9——

Q. Now wait—1880–'1 you say would be approximately the same?

A. Yes, as 1881–'2. For 1888–'9 the probable catchment would have been 3,000,000,000 gallons, the rainfall at the dam being 9.68 inches; for the year 1876–'7 the catchment would have been less than 200,000,000, the rainfall being 5.55 inches. For the benefit of the board and inquirers I want to state that the rainfall in this section for the past twenty-two years has exceeded by nearly one

and one-half inches per year the average rainfall for the preceding twenty-two years.

Q. How is that, the rainfall for the last twenty-two years, that is the average rainfall for the last twenty-two years has exceeded by one and one-half inches the average rainfall of the preceding twenty-two years?

A. The average rainfall of the preceding twenty-two years.

Q. What are we to understand from that, that the rainfall in this section is increasing?

A. We are to understand that in accordance with my observations and examination into rainfalls, that there are cycles. In New England there was a defined cycle of twenty-five years between high-average rainfall and low-average rainfall varying from twenty-five or thirty to forty-five inches, and what the understanding may be from this is a matter of judgment at the present time, not
723 having sufficient records to determine what would be the safe understanding.

Q. Does not observation show that the rainfall in unsettled and undeveloped countries increases as the country is developed and put under cultivation?

A. That would depend largely on the locality and the influences which produce rain and the magnitude of the settlement and cultivation.

Q. Without reference to magnitude, does not the settlement and development and growth of trees and vegetation have a tendency to increase the rainfall?

A. It has a tendency.

Q. Now this record you have given us covers twenty years, I believe?

A. Yes sir.

Q. And during that twenty years there have been only four years when the rainfall was less than two billion gallons?

A. Allow me to say that the catchment has been——

Q. The catchment I should say.

A. Yes, I think that is right.

Q. How many times have you had occasion to draw the water off from this reservoir?

A. We have had occasion only once and that was previous to my connection with the company.

Q. At the time of the controversy with George Neale?

A. Yes sir.

Q. In your estimate of this two and a half billion gallons, of water for actual use, you do not take into consideration the average rainfall during the period of twenty years do you, but rather base it upon the fact that every other year may be a dry year, affording a catchment of less than one-half billion gallons of water?

A. The basis of our estimates of the usual available yield
724 from the reservoir is taking a year of great catchment with a reservoir full at the beginning of the irrigation season, and then adding to that full reservoir the actual measured yields of the next year or next two years, deducting from that the actual evapora-

tion for the year, or two years, and then dividing that available quantity of water between the two or three years.

Q. Between the two or three years?

A. Yes sir.

Q. When was the reservoir completed, or the dam completed?

A. In April, 1888.

Q. Did it fill, the first year after its completion, the first winter?

A. The reservoir at the beginning of the season of 1888——

Q. It was completed in the spring of 1888?

A. Yes, and at that time, May 10th, 1888, there was stored in the reservoir 2,401,247,000 gallons.

Q. You had been storing water there before the dam was completed?

A. Yes sir.

Q. Then the following winter of 1888–'9 what was the catchment?

A. The catchment and the waste amounted to a total of 8,200,000,000 gallons.

Q. In 1889–'90?

A. In 1889–'90 the probable catchment would have been ten or more billion gallons, but was not accurately computed owing to the method of waste through the Neale tunnel.

Q. In 1890–'91?

A. The catchment and waste was 6,700,000,000 gallons.

Q. In 1891–'2?

A. In 1891–'2 the catchment was 2,000,000,000 gallons.

Q. In 1892–'3?

A. In 1892–'3 the catchment was 5,200,000,000 gallons.

725 Q. That gives a period of six years?

A. Yes, sir.

Q. Taking those six years what was the average catchment, just figure it up please, about 35,000,000,000 gallons was it not?

A. The average catchment was the amount that we could impound in our reservoir, which could not be exceeded. In the computations for the duty of our water system we can only take the maximum quantity possible to store in our reservoir, and then add to that the quantity that we may catch in the dry seasons following. What may be the possible catchment in a very wet season has absolutely no influence over the duty of this system.

Q. It is a fact however that during those years your reservoir would have filled every year would it not, or very nearly so?

A. It would have filled, depending on the quantity used.

Q. Assuming that you had used say 3,000,000,000 gallons or 4,000,000,000 gallons?

A. If the total loss due to use and evaporation had not exceeded four billion gallons, it would have filled, beginning with 1888–'9, one, two, three, four, five years.

Q. Now in this question of catchment, you give the catchment for the entire year, and all that is received from your water-shed do you?

A. We do sir to the best of our ability to compute it.

Q. Your water-shed begins at the Cuyamaca mountains does it not?

A. Yes sir, it begins on the west side of the Cuyamaca mountains.

Q. And the quantity of water which you receive does not depend upon the rainfall at the reservoir at all, and is not governed in any manner by that is it?

A. Not directly, no sir.

Q. Now Mr. Savage, can you increase the capacity of your reservoir by enlarging or raising your dam?

726 A. We can, yes sir.

Q. To what extent is it susceptible of increase?

A. The increase is a matter of business policy, and requirements. It has a very large possible increase, but the increase in the reservoir beyond a reasonable limit would not be advisable because of the small catchment in certain years.

Q. What increase in capacity would you consider reasonable?

A. I would not consider any increase beyond the present reasonable or feasible until there was some financial reason for it.

Q. In other words I understand you that as an engineer, with your present information you would not pursue the policy of your predecessor Mr. Schuyler and construct such a system until there was a demand for it?

A. I should as an engineer pursue the policy that is outlined to me by the company paying for my services.

Q. You would follow their instructions?

A. I would sir, if it did not conflict with my ideas of right and duty.

Q. But I am now asking for your ideas without reference to what the company desires to do. We all believe that you could conduct this company in a great deal better manner than the company has. Now to what extent would you consider the increase of the reservoir reasonable, assuming that there was demand for the water?

A. The probable available supply for storage on the Sweetwater river would be six billion gallons storage reservoir, not to exceed two and one-half billion per year; eight billion gallon-storage reservoir not to exceed three and one-half billion gallons per year; ten billion gallons storage reservoir not to exceed three and one-half or four billion gallons, and from a twelve-billion storage reser-

727 voir not to exceed four or four and one-half billion gallons.

Q. The present capacity is six billion gallons?

A. Yes sir, less the storage that has been destroyed by filling material.

Q. Its capacity was six billion gallons originally?

A. Its capacity was originally 5,877,072,000 gallons.

Q. You have since raised the parapet have you not?

A. We have.

Q. Does that not increase the capacity?

A. Not until we get some flowage land.

Q. Suppose you get the flowage land, to what extent would it increase the capacity?

A. It will increase the possible storage to 7,240,979,000 gallons.

Q. How many acres of land would be necessary for that flowage—I refer now to lands other than those owned by the company?

A. Yes sir, I understand. The actual area of the land to be flowed, in addition to that already owned, would be I estimate a little less than fifty acres?

Q. A little less than fifty acres?

A. Yes sir.

Q. So with fifty acres of additional land you would have a storage capacity of about seven and one-quarter billion gallons?

A. If we could buy fifty acres of additional land without any other we would have, yes sir.

Q. What is that fifty acres of land worth per acre, assuming that you could buy it at a fair price?

A. We have been buying land for as I recall about $50 per acre, in consideration of our taking several times what we actually required, to suit the wishes of the seller.

Q. Do you consider $50 per acre a fair and reasonable price for the land?

728 A. As we have been purchasing land at that price I would be governed by that fact and say that it was fair and reasonable.

Q. So then if you could buy this fifty acres of land for $50 an acre which you consider a fair and reasonable price, and for which sum you have bought other land in that vicinity, an expenditure of $2500 would enable you to increase the storage capacity of your reservoir about one and one-quarter billion gallons?

A. It would not, no sir, because we have not been able to buy the land we required at that price.

Q. Read my question please, Mr. Reporter. (Question read by the reporter.)

A. Answering the question literally, yes.

Q. What was the expense of raising that parapet or dam, what was the cost of it?

A. The probable cost of constructing the increased parapet, including the increased height of the spillway necessary to avail of the increased height of the parapet was probably in the vicinity of $5000.

Q. Do you know what the increased flowage lands cost that have been purchased by the company?

A. That have been purchased?

Q. Yes.

A. No sir I do not recollect what they have cost.

Q. Have you another storage reservoir or dam site or site for reservoir above the Sweetwater?

A. We have the ownership of some land in the Sweetwater valley where a dam might be constructed, provided we get the balance of the land required for building dam and storing water.

Q. Now what portion of cost of lands included in your reservoir site and which are not used for flowage, is included in the valuation of reservoir site as per schedule filed here? To explain, you state

that you place your valuation upon your reservoir. Is that valuation upon that portion of the reservoir in actual use, or does
729 it include other lands in the vicinity which are not used?

A. It includes only the land that we are absolutely obliged to purchase to get title to the lands we actually required for flowage.

Q. What number of acres do you include in your reservoir site, the valuation of which you included in your schedule?

A. I am unable to answer that question without reference to our deeds.

Q. Can you approximate it?

A. The actual area of land purchased at considerable price per acre is very small. We have 180 or 200 acres recently purchased to get title to some 25 acres that were required, the price of which was very small. Aside from that individual mountain tract, we have very little land not actually used.

Q. How much would you say in acres, that is taking the present contour line, and outside of that?

A. Taking the present contour line I would estimate approximately 100 acres.

Q. How many acres are there under actual flowage, that is for the present capacity of the dam, six billion gallons?

A. 721.86 acres.

Q. How many acres do you include in the reservoir site?

A. I do not recall without recourse to the records.

Q. Isn't it about 900 or a little over 900 acres?

A. Yes sir, that would be a reasonable guess.

Q. If that is true then there is more than 100 acres not used, isn't there?

A. That would depend upon the height that the water was impounded to. We had just been discussing increased parapet flowage previous to your inquiry.

Q. When you said that there would be 100 acres not used, did you me-n that with the increased parapet flowage?

A. With the increased parapet flowage.

730 Q. There would be 100 acres of the reservoir not used?

A. Approximately.

Q. What I wish to know now is with the present capacity of your dam and without the increased flowage how many acres of land is there not used for flowage land which are included and considered and so represented here as your reservoir?

A. Assuming that our other guesses are correct, it would necessarily be about 175 acres.

Q. What is the value of that land, $50 per acre?

A. The land has cost us varying prices, and estimated on the same basis as the other it would necessarily have the same value, the cost being taken now as its value, the same as we took the cost of the other as its value.

Q. Do you include in the reservoir the property bought from a gentleman by the name of Little?

A. We do, yes sir.

Q. How far above the reservoir is that, from the present eastern contour line?

A. In elevation or in extent?

Q. In distance.

A. In distance it is not more than four or five hundred feet I would guess.

Q. This increased capacity of your reservoir assuming that you purchased this fifty acres would enable you to irrigate how many additional acres of land, about 1,250 would it not?

A. It would give us a safe duty——

Q. Additional duty I mean now to what you have?

A. In accordance with the basis of my judgment and computations based on the rainfall that we have had and the catchment we have measured, the increased reservoir will enable us to supply surely not to exceed two and one-half to three billion gallons per year.

731 Q. That would give you seven and one-quarter billion, the increase would give you a capacity of seven and one-quarter billion gallons?

A. Yes sir.

Q. And it would enable you to supply two and one-half to three billion gallons for irrigation?

A. Yes sir.

Q. Would 750,000,000 gallons additional enable you to supply three and one-half billion gallons for irrigation? You stated Mr. Savage that eight billion gallons would supply three and one-half billion gallons for irrigation; you now state that seven and one-quarter billion gallons will only enable you to furnish two and a half billion gallons minimum for irrigation. Will you explain the inconsistency of those two answers?

A. The first statements were made from records previous to this last year's phenonenonally small rainfall and the answer just given you made after computing those last three years rainfall and actual yield.

Q. Have your answers to questions heretofore been given from data which you do not consider reliable?

A. They have not sir. That was given you on that basis, as already stated.

Q. And you consider it reasonably reliable do you not?

A. The statements made were reliable to the best of my information when they were compiled.

Q. Since making your computation here do you now change your answer to the effect that eight billion gallons will enable you to supply three and one-half billion gallons for irrigation?

A. The first statements made as just stated were made from statistics compiled before this last unprecedented small yield and in order to determine accurately what that would yield it would be necessary to compile a very extensive table and reduce them to detailed quantities; the statement just made regarding seven and one-quarter billion gallons was made after this last computation, and I

want to say that it is a physical impossibility to determine
732 exactly what this yield will be, as these tables in the past have been interpolated, and while to my knowledge and without question they are as reliable as anything that can be had, they cannot be taken as absolute, but must be secondary to the developments and measurements as the system is used and operated.

Q. And your last figures are based upon the unprecedented dry year of 1893–'4?

A. They are based on the unprecedented small per cent. of catchment since our observations were begun at the Sweetwater reservoir.

Q. That is for the year 1895–'6?

A. Yes sir.

Q. None of your answers to questions with reference to the number of acres of land which can be irrigated or the capacity of the reservoir are accurate are they Mr. Savage—they cannot be from the very nature of the case?

A. The answers as to the capacities of the reservoir in storage are from the nature of their source absolutely correct, but as to the probable catchment, the answers that have been given, as the results of these measurements, are as absolutely accurate as it is possible for us to have them, but the estimates of what has gone before, from the nature of their determination cannot be absolutely accurate.

Q. There is a wide range however between the minimum and maximum quantity of water which one can estimate can be supplied from the reservoir, is there not?

A. There is and must be necessarily, from the short time of the records.

Q. And one can testify to the maximum or to the minimum, and still be within the bounds of truth and reason can he not?

A. One can testify to the records and be reliable, and one can form a very reasonable opinion from what has been recorded
733 as to what has been the probable yield in past years before the records were begun, but of course it cannot be absolutely accurate.

Q. (Read by the reporter.) What is your answer to that?

A. Didn't I answer it?

Q. Answer that question. The answer is not responsive to the question. It can be answered yes or no. Do you not understand the question Mr. Savage?

A. No I do not sir, if that does not answer it.

Q. If in your judgment the quantity of water which you can supply from your reservoir is two billion to three billion gallons of water a year constantly, say that in your judgment the reservoir would supply two billion gallons of water.

A. Yes sir.

Q. That being the case and considering the fact that your duty is to your employer, would you not feel justified in answering the questions here and in testifying, to give answers within the bounds of what you considered the truth but to give such answers as would show the minimum duty, if the interests of the company so required?

A. If I could truthfully do so and had any reason for doing so I

should earnestly endeavor to do it that way. I want to say in addition to that that I have never received any instructions or intimations from any of my employers in this connection regarding the statements to be made as to the available duty of the water from that system.

Mr. SHAW: I do not want to be understood as intimating anything of the kind Mr. Savage. Your answer shows that you do just what all other experts do, and what we attorneys sometimes do in fixing an attorney's fee. All experts I think are alike—and I believe they are all honest.

Q. Since July 1895 how many acres of land have been placed under irrigation in your system?

A. I have in my hand some statistics of water use under
734 the Sweetwater system which I have compiled from the records of applications kept by myself to enable me to perform the duties of the office, and while not absolutely accurate they are as approximately correct as they reasonably can be. The use of water per acre and for domestic requirements is a constantly fluctuating one, and what might be true for one day might be several acres or several houses or a number of horses different from days before or afterwards. From November 1st, 1894——

Q. Since July 1st 1895 is what I am after?

A. The increase between November 1st 1894 and July 1st, 1895 was very small and to answer your question with the information that I think you want, the different between the use November 1894 and the present date will give it very closely. The total irrigated area November 1st, 1894 was 3,712 acres and at the present time approximately 4,650 acres.

Q. Now about how much of that was planted, in acreage, from November 1894 to July 1st, 1895, about how many acres, can you give us any approximation or estimate of it?

A. Probably a very small acreage; owing to the flood of 1894-'5 the pipe line was disabled and not put into service until if I recollect right, the 30th day of May, which would prohibit much planting up to that time, and the use from the system was so great from May until July the time of completion of the second main that I do not think there was a very extensive area; the company planted in 1895 a large area of land, most of it subsequent to that time inquired of, as I understand your question.

Q. About how many acres of this 938 acres planted since November 1894 has been planted by the company?

A. The company planted in 1895 367¼ acres and in 1896 238 acres.

Q. Have they planted any since then?

A. Their planting this season has been very limited, simply a few trees additional to the different orchards, a total acreage of I
735 would estimate less than ten.

Q. Less than ten?

A. Yes sir.

Q. This company land which has been planted, is that under the new pipe line or pipe line No. 2?

A. I estimate that the new planting is approximately divided equally between the old distribution system and main pipe line No. 1, and the new pipe line No. 2.

Q. How much land other than the company's land has been put under cultivation under the new pipe line No. 2—I refer now to new acreage.

A. Yes I understand. There has very little new acreage been planted by other owners than the company whose lands lie contiguous to this pipe line No. 2, but there has been probably fifteen or twenty acres in total that receives its supply very directly from this pipe line.

Q. That is the new pipe line?

A. Yes sir.

Q. What was the cost of pipe line No. 2?

A. $60,000.00.

Q. When did the irrigation season begin for trees?

A. The irrigation season at large begins on an average about the first of May.

Q. Then there was a shortage of water was there not when the pipe line was washed out and was not put in condition until about June 1st?

A. There was a time between the flood of January 16th, and May 30th, during which water was supplied through the pipe line or pipe lines under very little pressure, being taken into the main pipe line at a point some twenty-five feet below the base of the dam without pressure through a secondary main.

Q. Was the supply sufficient to enable the people to irrigate their orchards?

736 A. It was not sufficient.

Q. Then there was a shortage of water was there not?

A. There was a time during which water was not delivered for irrigation purposes to any great extent.

Q. Would you not call that a shortage of water?

A. It was a shortage to the consumer but not in the reservoir.

Q. I am speaking of the consumer—when I asked you yesterday if there had ever been a shortage of water did you mean me to understand in the reservoir or to the consumer?

A. In the reservoir.

Q. I will ask you now if the company has ever had occasion to furnish a short supply of water to the consumers in Chula Vista or to any one else under their plant except where that shortage was occasioned by the elevation to which the water was furnished?

A. No sir, there never has to my knowledge.

Q. Do you now exclude this time when the pipes were washed out? Wasn't there a short supply then? There was a short supply then Mr. Savage on account of the pipe being washed out?

A. There was of course.

Q. What reduction did your company make in the water rentals for that year to the consumer?

A. To the domestic consumer——

Q. I mean to irrigators, not the domestic consumer, but for irrigation?

A. None.

Q. You made none?

A. No sir.

Q. Have you a map of Chula Vista?

A. Yes. (Produces map.)

Q. In what part of Chula Vista are the unoccupied and unplanted blocks located?

A. The larger portion of them are in the southern parts with a continuous strip along the west side adjoining the bay.

737 Q. The dark colors or shades show the irrigated portions of Chula Vista?

A. Yes sir.

Q. And the uncolored and unshaded portions show that part of Chula Vista which is not irrigated?

A. Yes sir.

Map of Chula Vista is offered in evidence and marked Petitioners' Exhibit Y.

WITNESS: This plat is the land and town company's plat of Chula Vista, compiled in 1894, and shows the ownerships, the names of the property-owners being on the map, with the exception of those tracts owned by the land and town company, which are blank.

Q. Not designated by any mark?

A. Not designated by any mark.

Q. Now do laterals or pipe lines extend on all of the streets in the south part of Chula Vista?

A. They do, with one exception.

Q. What street?

A. Fourth avenue.

Q. There is a pipe line on Fifth avenue?

A. Yes sir.

Q. On Sixth?

A. No sir, Sixth avenue is the eastern limit. On Fifth, none on Fourth, on Third, Second, First, National.

Q. Upon what street or avenue is your main pipe line?

A. Our main pipe line extends down Fourth avenue from E street to First street, 24 inches in diameter, then diminishes to 12 inches in diameter, and extends down to Fifth street and ends. There is a main cross-pipe extending east and west along First street from Fifth avenue to First avenue, then reducing to 6 inches diameter and extending across National avenue some 700 feet. There is also a cross-main from the southern end of the Fourth Avenue main at Fifth street extending westerly to Second

738 avenue 8 inches in diameter and between Second avenue and First avenue 6 inches in diameter, and between First avenue and National avenue 8 inches in diameter, and then extending west on Fifth street approximately 2000 feet.

Q. Now this pipe line extending on Fifth street approximately

2000 feet runs through how many five-acre lots which are not planted?

A. The land west of the National avenue has been subdivided into ten-acre lots, the portion east of the avenue into five-acre lots. Let me ask you, to shorten it—is all that pipe line in use for furnishing water for irrigation?

A. The pipe line is not entirely taxed but largely so.

Q. Where does it terminate, upon what street?

A. On Fifth street between the two diverging boulevards.

Q. Are there laterals extending from that pipe line along the bay boulevards south?

A. There are not.

Q. Is there a lateral extending on National avenue south on Sixth street?

A. There is to the southern boundary line of National ranch.

Q. Is it used at all south of Sixth street?

A. It is.

Q. For what purpose?

A. It is used for the supply of a pipe line that runs westerly along Seventh avenue and supplies water to something over 100 acres of land in Otay.

Q. Is there a lateral on First avenue south of Sixth street?

A. There is a lateral on First avenue that extends to the south boundary line of Otay and into the township of Otay.

Q. Is that lateral used?

A. That lateral is used to supply water to forty or fifty acres of land.

Q. How about Second avenue, is there a lateral there south of Fifth street?

739 A. There is a lateral on that avenue that extends to the south boundary line of National ranch and supplies water to thirty or more acres of land.

Q. Is there a lateral on Fifth avenue south of Fourth street?

A. There is a lateral on Fifth avenue south of Fourth street that extends to the south boundary line of the National ranch and supplies 17 acres of land in Otay.

Q. Are there laterals on Fifth street, Sixth street, Seventh street and Eighth street in the south part of Chula Vista?

A. There are no east and west cross-laterals in Chula Vista except those on E street, First street, and Fifth street.

Q. Are there any in the south part?

A. There are none in the south part south of Fifth street.

Q. I said south of Fifth street, any part of Chula Vista south of Fifth street, east and west laterals?

A. There are laterals at half-mile intervals west of National avenue, one on each E street, G. street, Third street, Fifth street, and Seventh street.

Q. Are they in use?

A. They are all of them.

Q. For what prrpose?

A. For irrigating lands and supplying water to the county for sprinkling.

Q. When were those laterals on Bay boulevard and National avenue, First, Second and Fifth streets first put in service for supplying water south of National ranch, or south of the Chula Vista line?

A. Probably the one on Fifth avenue was put into use in 1889 or thereabouts; the one on Third avenue about the same time; the one on Second avenue about 1891; the one on First avenue about 1892 and the one on National avenue about the same time as the last.

Q. When Chula Vista was piped was not the system far ahead of the demands of that section and has not a great portion of
740 the pipe laid unused and decayed since, practically for want of use?

A. At the time of the construction of the system——

Q. Mr. Savage, I would like to have you answer the question yes or no, and then follow with any explanations or suggestions you desire to make? (Question read by reporter.)

A. No.

Q. If you want to, follow with an explanation, do you?

A. Yes sir.

Q. All right.

A. The system as constructed has proved to be greater than the immediate demands, although at the present time the system is very generally taxed throughout Chula Vista, and in many instances each one of the pipe lines extending the entire length of Chula Vista we have repeated complaints for lack of service.

Q. And yet you say that at the time it was completed and constructed it was not ahead of the demands of that section do you?

A. I say that at the time it was constructed it has since proved to have been in excess of the then immediate demands.

Q. I read now from the sixth annual report of the board of directors of the San Diego Land and Town Company to the stockholders, dated December 31, 1892, wherein one of the officers of the company says: "The pipe system when laid was far ahead of the demands, and much of the pipe was laid unused and decaying. Some of this we regret to say is absolutely useless and as water is needed will have to be replaced, in view of which our engineer has been making a thorough and careful examination of the water system of Denver and Colorado"—is that statement correct, that is that part of it which says "Some of this we regret to say is absolutely useless," and also that portion "The pipe system when laid was far ahead of the demands and much of the pipe has laid unused and decaying?"

A. Yes, sir, the point he had in mind at that time was un-
741 doubtedly spiral pipe, and I was making investigations to determine the kind of pipe to use in replacing spiral pipe.

Q. Well do you know what he had in mind at that time?

A. I know what I wrote him, advising him to allow me to make a trip to Denver for.

Q. Did you write him that the pipe system when laid was far ahead of the demands?

A. I do not think I did sir.

Q. And much of the pipe laid unused and decaying?

A. I do not think I did.

Q. Did you write him that a part of it was absolutely useless?

A. I undoubtedly wrote him that that portion of the pipe on Fourth avenue, Chula Vista, was absolutely useless.

Q. Can you give the aggregate number of feet of pipe originally laid, which has been taken up, whether replaced or not?

A. I have not that number of feet in mind, but I estimate about 300,000 feet of spiral pipe.

Q. Other pipe has been substituted for a part of that has it not?

A. Yes sir.

Q. How much of the pipe originally laid was taken up and no other pipe substituted therefor?

A. I estimate about five miles. A portion of this pipe was good pipe, and used in replacing a portion of the pipe taken up from different places.

Q. Then you have temporarily at least abandoned about five miles of pipe that was originally laid?

A. Yes, I would estimate about that quantity.

Q. Why did you abandon it?

A. Because of its worthless condition.

Q. You have gotten along without replacing it have you not?

A. We have gotten along without replacing that portion of it.

Q. That is about five miles of it?

742 A. About five miles of it in the extreme eastern limit of the Chula Vista tract, and through the southern portions along Fourth avenue.

Q. That is where the company's lands lie?

A. Where the company's lands lie, We have been replacing it as the increased demand for water in that section demanded.

Q. The cost of laying that pipe originally is included in the value of your pipe line and system as per schedule filed here is it not?

A. I understand that it is.

Mr. SHAW: That is all Mr. Savage.

Mr. HAINES: I will ask you just a question or two.

By Mr. HAINES:

Q. Mr. Savage, in your estimate of the available duty of the reservoir have you taken what in your judgment was necessary to give full water supply to the land which you estimated it would irrigate?

A. I have endeavored to do so sir.

Q. You made no estimate upon the basis of a certain number of years of full supply and then an occasional year of deficient supply?

A. No sir.

Q. If there were a full supply alternated by a deficient supply owing to the lack of rainfall, in an interval of about how many years would those alternations occur?

A. I would estimate about one year out of four on an average probably a little less than that.

Q. The fourth year will be somewhat short?

A. Yes sir.

Q. Mr. Savage, you mention that you have some sort of information that I use on my land water eleven times a year for irrigation?

A. Yes sir.

743 Q. How do you get that information?

A. I get that information from one of your neighbors.

Q. Who?

A. I refuse to say.

Q. I guess you had better tell Mr. Savage.

A. Well, I refuse to do so.

Q. That is all you know about it is it?

A. That is all I know about it.

Q. What was it used for, did he say?

A. It was turned onto your place in the pursuance of irrigation.

Q. For irrigating what?

A. Trees.

Q. Eleven times a year?

A. Yes sir.

Q. What year was that?

A. As I remember, 1894.

Q. 1894–'5, or 1895–'6?

A. 1894 or 1893 I should say.

Q. You cannot tell which of those years?

A. No sir I am unable to state.

Q. Do you actually believe that I irrigated my trees eleven times?

A. I actually believe Judge that a great many of our people are irrigating their trees from six to eight or nine times, and in your case I do not believe that you irrigated your land thoroughly eleven times, but it is very possible that irrigating water was turned on in considerable quantities that number of times. The irrigation of land under our system has been carried on in a very reckless and unreasonable way.

Q. Has it been in my case to your knowledge?

A. I regret to say Judge that I think your land has been over-irrigated.

Q. When?

744 A. Up to the last year or two.

Q. Do you know anything about it the last two years?

A. I am very frequently by your tract, but being one of some four hundred others, I am unable to state positively the condition.

Mr. HAINES: I guess you do not know much about it. I think I use probably less water than any one around my neighborhood.

WITNESS: Judge you will allow me to say that that is a personal factor with every irrigator under our system—especially our horticultural superintendent.

Q. You are the civil engineer of the company?

A. I am sir.

Q. The chief civil engineer?
A. I am sir.
Q. Are there any other civil engineers?
A. There are not.
Q. What proportion of your time during the last year was put in in the work of the civil engineer proper in the managing of the company's water system?
A. The work of a civil engineer proper as I understand it is a very elastic affair.
Q. Well, waiving that then, what civil engineering work did you do in which you used instruments as a surveyor or civil engineer during the last year?
A. A civil engineer usually is not spending his time using instruments. Instrument men are employed for that purpose.
Q. Are the duties of a civil engineer advisory?
A. The duties of a civil engineer are advisory and of a superintending nature.
Q. Now what superintendence have you done during the last year?
A. I have personally superintended the operation of the water system in general and in detail.
745 Q. Now what in general?
A. In general I have charge of the water system from the dam, reservoir, down through the pipe lines, including the services, and the details incident to the operation of a water system.
Q. What construction has there been during the last year?
A. The construction during the past year has been very limited, up to within some sixty days, during which time we have been getting out plans for the replacement of several miles of our larger mains on National avenue.
Q. Within National City?
A. Partially within National City, and partially without.
Q. Have you changed the location of pipe lines or the grade of them?
A. We have determined to change the grade of pipe lines and we have under construction at the present time a trench for the construction of an additional pipe line.
Q. If an engineer had been employed to draw plans and give advice for that what would his services have been worth?
A. It would depend entirely upon his knowledge of the conditions governing that work. With the results that we have had in the past in using defective pipe, if it could have been for-seen his services would have been of great value.
Q. Well any competent engineer could advise what kind of pipe to use couldn't he, in five minutes?
A. I do not know that he could no sir. I am free to confess that it is a problem to me today what kind of pipe to use, under certain conditions.
Q. You would give your opinion in about five minutes—couldn't you?
A. I would sir.

Q. It did not require an employment throughout the year to do that?

A. It has required a very close observation for ten years,
746 and I have not got it fixed yet.

Q. Any ordinary man could make that observation couldn't he, any intelligent foreman of a pipe line?

A. Yes sir he could make an observation.

Q. And you simply observed how these iron pipes have been working, that was all, wasn't it?

A. I have, yes sir—that is all.

Q. Could not any intelligent man make a report after observing it from year to year?

A. He could make a report, yes sir.

Q. And the rest of your duties have been overseeing the water supply, seeing that water was not wasted, haven't they?

A. That has been one of my usual duties, yes sir.

Q. Is not that the greatest proportion of your duties?

A. That has been one of the most harassing parts of my duties, yes sir.

Q. It takes most of your time too, doesn't it?

A. It takes considerable of my time.

Q. That is not engineer's work is it?

A. It is in that sense one of the highest forms of engineer's work sir, to use reasonable diplomacy or discretion in the management of a water system, or some other work of magnitude.

Q. The engineer's services lie in dealing with diplomacy with these recalcitrant people?—the value of them?

A. Not entirely, that is one of the values.

Q. The salary that you charged to this company and put into these expenses is $1800 a year?

A. It is sir.

Q. That is on the basis of an expert and responsible engineer?

A. That is on the basis of an expert and responsible man in charge of that department.

Mr. HAINES: That is all.

747 By Mr. WORKS:

Q. Mr. Savage, in this statement of expenses, costs and so forth an item of six per cent. on the pipe lines has been allowed for depreciation, is that in your judgment a reasonable allowance on account of depreciation of the pipe line?

A. Yes sir, to the best of my knowledge that would be reasonable.

Q. You have spoken about having to replace one of your large pipe lines, what is the reason or necessity for that replacement?

A. The worn-out condition of that main pipe due to the character of the soil through which it is laid.

Q. What length and size pipe line will have to be replaced at the present time?

A. Probably about a mile will have to be taken up and partially

repaired and largely replaced. It is undetermined at the present time what will be the final outcome of the investigations.

Q. Have you made any estimate as to what will be the probable cost of making that change?

A. I have made a very rough estimate, but bids are being received.

Q. Could you give the board some idea about what the cost of replacing that pipe will probably be?

A. The replacements that will have to be made within two years that we are about to begin on now, and that will be continued as proves necessary will amount to between five and ten thousand dollars.

Q. What have you noticed if anything, with reference to the necessity for repairs upon the pipe line, as to whether the necessity increases as time goes on or not?

A. The necessity for repairs is increasing very rapidly, especially in the large 36-inch main down through the Sweetwater valley.

Q. What would that indicate as to the depreciation of the pipe?

748 A. It indicates a rapidly increasing depreciation in the pipe.

Q. Well, have you found that increase in other places besides upon the main pipe line?

A. The increase is very general throughout the system and in a number of cases we are replacing short sections as they become defective.

Mr. WORKS: That is all.

By Mr. HAINES:

Q. Mr. Savage, where is this mile where you speak of the necessity of its being taken up within the next year or two and partially repaired and replaced?

A. That is across the Sweetwater River bottom and within the limits of National City across the various sloughs on National avenue between Fifteenth and Nineteenth streets.

Q. This is all in National City then isn't it?

A. Oh no.

Q. You say across the Sweetwater River bottom?

A. Yes sir, that portion of it is, and there is also a portion of our 30-inch main.

Q. Where?

A. At Bonita, in the region of the packing-houses that has been giving us great trouble the past year and a half.

Q. How much of that?

A. There is about a thousand feet of it that is being very generally troublesome.

Q. How much of that will have to be replaced?

A. The replacements cannot be anticipated with any special degree of accuracy as to time, but the entire thousand feet will have to be replaced within a very few years, two or three probably.

Q. Now is all the pipe inside of National City but that, that you were speaking about?

A. Yes sir, all of the most defective pipe.

749 Q. Is any part of that within National City, some of this spiral pipe?

A. No sir, there is no spiral pipe in service at the present time except short sections, and mostly on E street Chula Vista.

Q. Have you had any leaks between the hill the other side of the Sweetwater bridge and the hill this side of the Sweetwater River flat?

A. Yes sir, we have a great number of leaks along the bottoms between these two hills.

Q. I travel that road a good deal, I haven't noticed any, are you certain that you have a great number of leaks there this season?

A. Yes sir I am absolutely certain that we have a great many leaks there.

Q. How many have you had there in the last year?

A. We have probably had on an average of two a week throughout that entire time. We have sections of the pipe where there are two to four rivets drawn in succession on the round seams.

Q. Now that pipe connects the pipe line No. 1 and No. 2 doesn't it?

A. That is pipe line No. 1, or a part of it. It is the circulating medium between the Chula Vista distribution system and the National City distribution system.

Q. I want to ask you with reference to the land under irrigation Mr. Savage. You gave 717 acres as purchased of the company, and 694 acres to which the company sold water rights and 970 acres to which it annexed the water right without payment, and 1352 acres irrigated by the company outside of National City. Where is the rest of the 4600 acres of land under irrigation?

The answer to this question is deferred until the afternoon session, and pending the further examination of the witness the board adjourns until two o'clock this afternoon.

750 Afternoon session.

H. N. SAVAGE, recalled, testifies.

Last question repeated by the reporter.

A. The balance 867 acres is within the corporate limits of National City, of which the company sold 51 acres, the company is cultivating 117 acres and leasing 25 acres, a total of 193 acres, and water rights owned by others obtained by use 607 acres, by purchase 67 acres, a total of 674 acres making the grand total of 867 acres, the difference between 3733 acres, the total outside acreage, and 4600 acres the grand total.

JOHN E. BOAL, recalled, testifies.

By Mr. HAINES:

Q. Mr. Boal, what in your judgment, based upon past experience is the number of acres that could be irrigated from the Sweetwater reservoir at the six-billion limit, provided the irrigators were prepared to accept the condition of less than a full supply in such years as it would become necessary to do so by reason of deficient rainfall?

A. I have not in mind the frequency with which those short years will occur, and some of them would be very much shorter than others. Now if the irrigators would be satisfied to take a short supply in all years in which we receive less than two billion gallons, it would mean one thing.

Q. Suppose that you fix or take the assumption that the irrigators would take the deficient supply in such years as the rainfall would yield to the reservoir not over two billion gallons, how many acres could then be put under irrigation under the system?

A. I do not know upon what basis to figure that, Judge. I
751 have never tried to determine what we could irrigate under those circumstances. It is something that we have had in mind; we have known that we could largely increase the amount irrigated if we were to limit the irrigators in certain years, but it would be the merest kind of guess on my part to attempt to tell you off-hand.

Q. You have never come to any conclusion satisfactory to your own mind in your investigation have you?

A. I have never attempted to carry out that investigation to a conclusion. It in my judgment would be unwise as an irrigator to be satisfied with a short supply frequently; for instance, it might be wise to accept a short supply once in five years, or once in ten years, but it would be unwise in my judgment to raise the duty of our reservoir to such a point that irrigators might be called upon to take a short supply once in three years.

Q. Once in seven years you think it would be wise for all concerned to be satisfied with less than the full supply for irrigation?

A. I say off-hand that once in seven years it seems to me would be a reasonable arrangement.

Q. Do you think it would be wise to limit the acreage put under irrigation to the number of acres that could without question be supplied every year with the full amount necessary to keep the orchards in full fruitage?

A. It seems to me there is a grave question whether it would — wise to do that.

Q. Mr. Boal, in giving the proceeds of water rights sold since 1893, I take it you excluded any consideration of water rights on lands the company owns and is irrigating?

A. Yes, we excluded those.

Q. Now has your present company or its predecessor company ever charged itself upon its books for water rights on the 1600 acres or any part of the 1600 acres of land now under irrigation?

752 A. It has not.

Q. Why has it not charged itself up with the value of water rights for those lands? First let me ask, has the company water rights annexed to those lands?

A. It has always treated the water right as something that whatever it was passed with the ownership of the land, to the purchaser.

Q. How was it before the land passed?

A. Well there was no question but what the same water right existed there, and that that land has a water right.

Q. Why has the company not opened an account and charged itself with the value of those water rights annexed to its own lands under irrigation?

A. I do not see exactly where there is any advantage in doing that.

Q. But why should not it be done if it charges up on its books, or credits up on its books proceeds from water rights sold?

A. Because we received something from that, but the land we have irrigated we have not received any amount for.

Q. Are you not failing to make a distinction between this company as a public land company and a private land-owner?

A. I may be failing to do so, but I do not see exactly where the difference is. There are some things that I am not quite bright enough to tell the difference between, Judge, I find.

Q. Has the company charged itself up with six per cent. upon the assumed value of the water right, $100 per acre?

A. It has not.

Q. Well if the water company is a public institution and the land company is a provate institution, why shouldn't you charge up the land company with the value of water rights on this 1600 acres?

A. Well we have always confined our water-right transactions to something we have received.

753 Q. To money who receives?

A. Money the land company receives, the corporation which owns the water system and the land.

Q. Well now then why should not the land company pay *for* water company for these water rights?

A. There is no separate company, between the two; one corporation owns both the land and the water.

Q. Are there not separate accounts of the water department and the land department?

A. Yes, just as you would have separate accounts in carrying on any business; we have not charged nor credited anything to those people who got water without paying anything to us?

Q. That is because the company gave away those water rights is it, not asking anything?

A. Well we did not ask anything of those people.

Q. But why should this water company not have received from the land company something for these water rights annexed to this 1600 acres?

A. Well you speak of the water company as though it were a separate institution. It is not.

Q. I only follow the precedent we have in the case of Lanning against Osburn, where it is claimed it was so public it could not make a contract with the consumers. Is not this the fact Mr. Boal, that the land company of the San Diego Land and Town Company, as a land company, did not pay anything to the water company for these water rights because the San Diego Land and Town Company built that system?

A. I should say that was true.

Q. So really the land department of the company is not charged with those water rights because the company constructed the system?

A. Yes, I am prepared to say that is so.

Q. And the water and the land was all one property then
754 so far as the company still continues to own and irrigate its own land?

A. I think so.

Q. And where it sold its land, the water and the land went together didn't it?

A. I think so. That has been my idea of it.

Q. Mr. Boal, will you be kind enough to give from the accounts kept upon the books of the company, the amount of depreciation of the Sweetwater dam and pipe line No. 1 for the year 1888 as shown upon the books of the company?

A. The books show nothing as to depreciation for 1888.

Q. Is there no heading in the books of the company for depreciation of which an account is kept?

A. There is. That account was opened in 1896, as I find from this statement.

Q. Are these figures copied from the books of the company?

A. They are.

Q. And there never was any account opened on the books of the predecessor company or of the present company until the year 1896?

A. Not until the year 1896.

Q. Why was no account opened on the books of the company prior to 1896?

A. I should say of inadequate knowledge of what really should constitute the water-department accounts.

Q. Isn't it attributable partly to a new legal theory adopted about 1896?

A. I think not. The depreciation was something that every one knew about after they had had any experience with the water system at all; we simply failed to carry it upon our books in such an account.

Q. But it was put on before the new company in competition with other bidders bid for this system wasn't it?

755 A. It was.

Q. And when the new company bid for this system then it did not buy it without a knowledge of this account?

A. Well I have no knowledge of what the reorganization committee knew or did not know. They might have known it, if they examined the books. It occurred on the books just as it appears upon this statement.

Q. These books were among the assets which were sold to the new company?

A. I suppose so.

Q. And was on the list of assets kept on file in the office in Boston and in National City for the information of bidders, under the decree of sale in the United States circuit court?

A. I do not recall whether they were listed with other assets or not.

Q. They were there to be seen by all bidders were they not?

A. They were in National City to be seen by all bidders.

Mr. HAINES: So far as I know there is nothing further to ask Mr. Boal.

By Mr. WORKS:

Q. Mr. Boal, was any account ever kept upon your books of the water rights upon either side—that is was the company ever credited upon its books with the value of its water rights?

A. No, the only accounts as to water rights that have been kept upon the books were the amounts we have received for water rights sold as shown by the statement furnished.

Q. Well as a matter of book-keeping between the land department and the water department of the company, if any account could properly be kept at all with reference to the water rights, it would be proper to credit the company with the value of its water rights as a whole, would it not, as against other consumers, if you were going to charge the company up with water rights upon its own lands?

756 A. It seems to me if our own land would be charged, all other lands ought to have been charged.

Q. In making up the cost of the system, you have never included the water rights themselves?

A. We have included nothing but the moneys paid out for the various items as shown by this statement. That represents actual cash transactions, to the best of my knowledge.

Mr. WORKS: That is all.

By Mr. HAINES:

Q. To what kind of water rights are you alluding in your answers to Judge Works? Will you define what you thought Judge Works was referring to in using the phrase "water rights."

A. Which answer please? As I understand the phrase water rights it means the right to the use of water upon lands that we have sold or that we have given water to.

Q. How can that land use it without using your water system?

A. It cannot very well use it unless it receives the service from our water system.

Q. So then a water right is the use of your system is it not?
A. It goes back to that, yes sir.
Q. And that is what you talk when you sell a water right?
A. We certainly mean that the person receiving the water right shall have the use of our system to the extent of receiving the water that he has contracted for.
Q. In other words, by a water right is meant just precisely what section 552 of the Civil Code defines as the right to the flow and use of water through your system?
A. I would very much rather have lawyers interpret the Civil Code.
Q. You answered Judge Works, is not that what you meant when you answered Judge Works?
A. I tried very hard to define just what I meant by a water right, a minute ago.
757 Q. Doesn't it come to that, that it is the right to the flow and the use of water through your system?
A. I think I meant awhile ago when I said that the owner had the right to the use of water, that he has the right from year to year to receive so much water—as I understand it.
Q. Where, at the dam, or on the mountains?
A. No, after it has passed through our system.
Q. So really when you speak about a water right it is based upon the construction of the system isn't it and the use of it?
A. It certainly represents a part of the capacity of that system.
Q. And the valuation of a water right must take into account the cost of the construction of the system, must it not?
A. I do not know that it must do that.
Q. Upon what else would you base it?
A. A water right might be——
Q. No, but in this case?
A. It is the right to the use of so much water and the obligation of the company to deliver so much water to the person using it—it must be that.
Q. Through the system?
A. Through the system.
Q. Now when you talk about the obligation of the company to deliver, is that anything more than to keep the pipes in repair and the dam in repair and let the water run?
A. That would be one of the obligations surely.
Q. That is all there is of it isn't it?
A. Yes.
Q. It works by gravity doesn't it?
A. That is the operation of it.
Q. And when the system is in repair it is self-operating, isn't it?
A. To a very large extent, the water flows from the dam to the lower points.
758 Q. Isn't it to the whole extent self-operating when kept in repair?
A. Well I conceive that the company has certain duties to per-

form in the operation of the system that are necessary, whether the system is in repair or not, or in a system that is in absolutely perfect repair, the company still has certain things to do.

Q. In the way of management isn't it, to use a statutory phrase?

A. In the way of management, and in the way of regulation of the supply of water at the dam it might be.

Q. Yes—that is it opens the gates, and then it goes?

A. It opens the gates.

Q. In other words, if the company does not obstruct the flow, the water flows itself doesn't it?

A. Yes sir.

Q. Mr. Boal, your estimate speaks of the value of a water right of $100 an acre. Will you state what elements enter into that element of the value of a water right? estimate

A. There have been a number of theories advanced.

Q. Are there not some facts in this Sweetwater system—what are the facts about it?

A. I am unable to say what the managing officer of the company had in mind when that was adopted.

Q. Did your company as a matter of fact exclude all consideration of the cost of the construction of the system from this valuation of a water right?

A. I think that the cost of the system was one of the elements in mind by the company.

Q. Now was there any other element?

A. There might be the element of what it is worth to the purchaser receiving it, what he would be willing to pay for it.

759 Q. That then would be the increase or profit of the company over and above the cost of construction wouldn't it?

A. What do you refer to when you say "that"?

Q. When you say there is an additional element to the cost of construction, that additional element is simply the profit to the company—wouldn't it be?

A. That might be it, yes.

Q. And to a reasonable extent that is legitimate, in your judgment—wouldn't it be?

A. Yes.

By Mr. WORKS:

Q. Mr. Boal, I suppose in these inquiries with reference to a water right you have been answering with reference to the water right that belongs to the consumer?

A. Certainly.

Q. I was asking you about the original water right of the company in the water it appropriates and stores in the reservoir for use. That water right has never been charged upon the books or credited upon the books anywhere has it?

A. No.

Q. Suppose the company had simply appropriated, and constructed the reservoir for its own use and never have sold any of the water

to others, but applied it to its own lands, that would have been a valuable water right in its hands, would it not?

A. Yes sir.

By Mr. HAINES:

Q. Do you mean to say Mr. Boal, in answer to Judge Works, that the purchaser of a water right from the company got no right to the use of that water which Judge Works talks about being appropriated?

Mr. WORKS: I did not ask him anything of that sort.

A. I understand that the purchasern of a water right, or the owner of a water right, however acquired under our past
760 practice has the right to the use of his proportion of the water that is stored from year to year by the company, but I understood Judge Works to refer to the acquiring of those water rights.

Q. Now what is this water right that the company had that Judge Works speaks about, over and above the works, the reservoir and pipe lines of the company?

A. It by its works secured the water that flows in the stream in the Sweetwater river.

Q. Now if that is public property then the company would not have any title to that water, would it?

A. As I understand it, not except as it makes use of it.

Q. And if it is private property, if they sell or give away a water right, they give away the water right don't they, or sell it, as the case may be?

A. They may sell of give away the water right, yes sir.

Mr. HAINES: That is all.

Mr. WORKS: Is Major Earle here? We wanted to ask him a few questions, but we can do it later when he comes in. I want to say to the board that this closes the testimony that we want to offer. It seems to us to cover the information that the board would probably want from us in fixing the rates. If there is any other item that the board wants to inquire into, or any information we can give them, we are here to furnish all the information we have in our hands. I have simply undertaken to go over this matter and bring out what I thought was proper to be considered. If there is any other matter that the board wa-s to go into, we are here to be interrogated, or furnish any information that we may have.

The CHAIRMAN: I want to say that I asked two or three questions there, and asked Mr. Savage if he could give me the information, and he is making it up now, and I would like him to state it as soon as he gets through.

Mr. WORKS: Very well.

761 Mr. SHAW: Mr. Chairman, the petitioners now offer in evidence a certified copy of the decree ordering foreclosure and appointing receiver, and ordering sale in the case of H. R. Mandell and Boston Safe Deposit and Trust Company, *versus* The San Diego

Land and Town Company, being No. 660, consolidated, in the circuit court of the United States, ninth circuit, southern district of California, and ask that it be marked Petitioners' Exhibit X. I do not think it is necessary to read that, unless Judge Works requires it to be read now. It is merely as a basis for other testimony, and will be read in the course of argument, is my idea, and discussed at that time.

Mr. WORKS: I want to enter my objection to this testimony and all testimony of this kind, which I suppose is intended to prove the market value of the property, or the value at which the present company purchased the property, on the ground that it is immaterial, irrelevant and incompetent, and I do not care to take up the time of the board in discussing the relevancy of the testimony. The board may hear it, but I simply make the objection in order to preserve our rights with reference to it. We shall insist in the end that it has nothing whatever to do in the fixing of the rayes. It is simply for the purpose of preserving my rights that I want to object to it, and then counsel can go on and read whatever he likes, with the understanding that all this line of testimony is objected to on the same ground.

Mr. SHAW: Yes, I understand, subject to your objections upon the argument in the case.

A. I now offer in evidence certified copy of the report of receiver on sale of property before mentioned. It is suggested that I might as well read that, it is short.

Title of Court and Cause.

Report of Receiver on Sale of Property.

Respectfully shows to the court Charles D. Lanning, for this court and also for the circuit court of the United States for the dis-
762 trict of Massachusetts, receiver of the above defendant San Diego Land and Town Company:

1. That pursuant to a decree of said Massachusetts court dated April 5, 1897, in a cause in equity numbered 662, consolidated on its docket and further pursuant to a decree of this court in the above-entitled cause dated April 4th, 1897, said decree ordering sale of the trust estate in the possession of such receiver to be made at public auction between the hours of ten a. m. and one p. m. on June 14th, 1897, at the front door of the office building of said defendant San Diego Land and Town Company in National City, county of San Diego, State of California, due notice of said sale was given as required by said decrees by publication and mailing notice a copy of which is contained in the affidavit of publication hereto annexed marked "A."

2. That pursuant to said decrees and notice and further pursuant to an order made by this court in this cause dated June 11th, 1897, said sale was duly had at the time and place required by said decrees.

3. That following the reading of said decrees and order and a full description of the real property to be sold and the personal prop

erty to be sold, it was stated that said descriptions were according to the conveyances it was proposed to execute in pursuance of sale, and that said descriptions agreed with the detailed lists referred to in said notice, and that said lists had been accessible at the office of the receiver in Boston, Massachusetts, and in National City, California, for a period of two months during the publication of said notice and in accordance with said decrees.

4. That in reply to an inquiry of Messrs. Oscar Trippet and Volney Pattee claiming to represent certain stockholders, said inquiry being as to whether the personal property being sold was present in view, it was stated that said personal property was all of the real property of the company in actual use or in its storehouses and stables, except the $451,000 mortgage bonds of the National City and
763 Otay Railway Company which were in the possession of the Boston Safe Deposit and Trust Company, trustee under the mortgages being foreclosed, at the office of said trust company in Boston, Massachusetts, and also excepting the office furniture of the defendant land company at its office in said Boston, one hundred fifty shares of the capital stock of the Sweetwater Fruit Company of the par value of fifteen thousand dollars, and certain diamonds (taken by the defendant land company for a debt) of the estimated value of $900, said stock and said diamonds being at the office of said defendant land company, in said Boston. It was further stated that all said personal property had been accessible for examination during the period of publication of said notice and up to the time of sale.

5. That following said statements and a statement of the terms of sale and upon a call for bids, certain protests against the sale were made, which protests at the request of the receiver were put in writing and copies thereof are hereto annexed marked "B" and "C." That said sale was kept open for the making of bids during the full time specified in said decrees.

6. That at said sale two bids were made for said entire estate and assets. That a bid was made by Benjamin P. Cheney Esq., on his own behalf, and was not completed by compliance with the terms of sale and hence is not reported. That said Benjamin P. Cheney, Esq., acting for himself and Walter L. Frost both of Boston, Massachusetts, as they are a committee with full powers acting on behalf of a reorganization committee consisting of themselves, Charles W. Shattuck of Winchester, Mass., and Edward H. Mason, of Newton, Mass., said reorganization committee having in charge the reorganization of said San Diego Land and Town Company on behalf of its shareholders under a certain plan of reorganization and reorgaization agreement dated December 9th, 1895, a copy of which is on file in this case, bid for said estate and assets an amount equal to the lowest price for which said estate and assets were authorized to be sold, offering to pay eight hundred eighty-nine thousand one hun-
764 dred sixty-three dollars and thirty-three cents, the amount fixed by the court in section "A" of paragraph 1 of the order of the court herein dated June 11th, 1897, in cash and in the receiver's certificates of indebtedness outstanding, and in the seven per cent.

debenture bonds and six per cent. mortgage bonds of said defendant San Diego Land and Town Company, and offering to give bond for forty thousand dollars as required by section "B" of paragraph 1, and by paragraph 2, of said last-mentioned order.

7. That the said Cheney and Forst as such committee deposited with the undersigned as such receiver and in accordance with the terms of sale the receipt of the said Boston Safe Deposit and Trust Company, a corporation duly organized and existing under the laws of the Commonwealth of Massachusetts, with a place of business in said Boston, said receipt acknowledging that said trust company holds subject to the order of said committee two hundred ninety-seven thousand and fifty dollars of said receiver's certificates of indebtedness, amounting with interest due to June 14th, 1887, to three hundred sixteen thousand, six hundred seventy-two dollars and ninety cents, and being assigned to the undersigned as such receiver subject to the approval of sale by the court.

The undersigned as such receiver therefore recommends that said bid be accepted, and the sale approved and that he be authorized upon proper payment to execute and deliver to said committee or to such person, persons or corporation as it may in writing designate, any deeds and conveyances that may be necessary to transfer and convey said estate and assets, copies of the deeds that the undersigned proposes to execute and of the purchasers' bond as aforesaid are hereby annexed marked "D," "E" and "F."

CHARLES D. LANNING, *Receiver.*

Mr. Dodge, will you let me have that paper I just gave you. (Exhibit X.) I want to call the board's attention to the time
765 of the notice of sale?

"That said sale shall be made at the front door of the office building of the said San Diego Land and Town Company in the city of National City, in said county of San Diego.

That said sale shall be made between the hours of ten a. m. and one p. m. on the 14th day of June, A. D. 1897.

That prior to such sale so to be made, said receiver shall give due notice thereof by publishing notice three times a week for six successive weeks, the last publication to be not more than twelve nor less than six days before the day originally set for said sale so to be made, said notice to be published for said period and as aforesaid in one daily newspaper published in the said city of Boston, and in one daily newspaper published in the said city of San Diego in the said county of San Diego.

Q. That such receiver shall give like due notice of such sale so to be made, by mailing notice postage prepaid to all stockholders of record in said San Diego Land and Town Company, so far as the same may be ascertained, said notice to be so mailed at least thirty days before the day originally to be set for said sale.

That two adjournments of such sale not exceeding ten days each may be made upon public announcement at the place of sale without further notice or further action of this court, and that such further adjournment may be had as this court may order, any ad-

journed sale to be had and made at the place fixed for the original sale.

That said notice so to be published and so to be given to said stockholders shall state the title of this cause in this court and in said Massachusetts court, and shall state that pursuant to decrees of said courts of given dates, the entire estate of said San Diego Land and Town Company will be sold by said receiver as an entirety at public auction on the day fixed, subject to adjournment for
766 cause. That said notice shall further describe the property to be sold as aforesaid by stating that it includes the property conveyed under said debenture deed of trust of February 1, 1890, and the property conveyed under said indenture of trust and mortgage of March 1, 1895, giving reference to the place of record and book and page of record of said debenture deed of trust and said indenture of trust and mortgage.

That said notice shall further state that detailed lists of said property may be examined by intending bidders at the offices of such receiver in the said city of Boston, and said city of National City; and said receiver shall keep at his said offices detailed lists of the property to be sold, which lists shall during business hours be open to the inspection of intending bidders.

That said sale of said entire trust estate as above provided in paragraph 10 of this decree be made for an amount not less than the aggregate amount of——" and then follows a list of the various amounts which aggregated the amount for which the property was sold.

Mr. WORKS: That was the amount of the outstanding debts wasn't it Mr. Shaw, and receiver's certificates?

Mr. SHAW: It is short, I will read it. (Reads.)

"1. The principal and interest to date of sale of the receiver's certificates of indebtedness against said trust estate duly issued as above set forth in paragraph- V and VI of this decree and duly outstanding at said date.

2. The principal and interest to date of sale of all the seven per cent. debenture bonds of said San Diego Land and Town Company and of all the six per cent. mortgage bonds of said San Diego Land and Town Company, duly issued as above set forth in paragraphs VII and VIII of this decree and duly outstanding at said date.

3. The amount of all bills and claims arising under the receivership, if any, against said estate, as may be determined by this court before the above date of sale.

767 4. Such other amounts, if any, as this court may fix before sale."

Under the decree as I remember it the proceeds of the sale were to be applied first to that indebtedness, and any surplus to the stockholders. That was as I remember it.

I now offer in evidence in the same case a certified copy of the decree confirming the sale made by the receiver.

"*Decree Confirming Sale.*"

Title of Court and Cause.

In the above entitled cause, all parties being in court, H. R. Mandell and The Boston Safe Deposit and Trust Company, a corporation, parties plaintiff, by their solicitor C. N. Sterry, Esq., The San Diego Land and Town Company, a corporation, party defendant, by its solicitors, Works & Works, Charles D. Lanning, the above-named receiver, personally, and also Benjamin P. Cheney and Walter L. Frost, Esquires, acting on behalf of a reorganization committee consisting of said Cheney and Frost together with Charles W. Shattuck, Esq., of Winchester, Massachusetts, and Edward H. Mason, Esq., of Newton, Massachusetts, said reorganization committee having in charge the reorganization of said defendant San Diego Land and Town Company, on behalf of its stockholders, under a certain plan of reorganization and reorganization agreement, a copy of which is on file in the record of this cause, said Cheney and Frost as such committee being bidders at the sale of the entire estate and assets of said defendant San Diego Land and Town Company, as appears from the report of said receiver on said sale on file in this cause, the court having read and considered the said report of said receiver, and the court having considered the whole record in said cause, and it appearing to the court that all things have been duly done and performed in the matter of the sale of the estate and assets of said defendant San Diego Land and Town Company in pursuance of a decree of the circuit court of the United States for the district of Massachusetts, made and entered in that court April 5th, 1897, in a pro-
768 ceeding numbered 662, consolidated, on its equity docket, in which proceeding the parties and matter in controversy are respectively the same as in this present cause, and in further pursuance of a decree of this court in this cause duly made and entered April 14th, 1897, and in further pursuance of an order of this court in this cause duly made and entered June 11th, 1897; and it further appearing to the court that said sale was fairly and equitably had and made and that the interests of all parties concerned in the said estate and assets have been equitably protected therein and thereby, and it therefore appearing to the court that the bid received for said estate and assets at said sale should be accepted and said sale approved, ratified, and confirmed, and that the recommendation of said receiver in said report should be accepted, it is by the court ordered, adjudged and decreed that the acceptance by said receiver of said bid of said Cheney and Frost as such committee, and the sale of said entire trust estate and assets to said Cheney and Frost as such committee, be, and the same are hereby approved, ratified and confirmed, and that all equities of redemption in or to said trust estate and assets, or any part thereof, are hereby declared to be forever barred of recovery and foreclosed. And the said receiver is hereby authorized and ordered upon proper payment, to execute proper deeds and conveyances, transferring and conveying to said

Cheney and Frost as such committee, or to such person, persons, or corporation as said Cheney and Frost as such committee may designate by requesting in writing, duly acknowledged and filed in the record of this cause, said entire trust estate and assets.

It is further ordered, adjudged and decreed that the conveyance of said estate and assets provided for herein shall be made by said receiver and accepted by the grantee subject to all pending interventions in this cause which have been admitted to be considered therein by this court, and subject to all orders and decrees
769 therein made or hereafter to be made by this court in the matter of such interventions.

Los Angeles, July 27th, 1897.

ROSS,
Circuit Judge."

I would ask that this be marked Petitioners' Exhibit N.

Mr. Boal, have you a list or schedule of the property referred to in that decree and order confirming sale and receiver's report?

WITNESS: I have a list here, I am not quite certain that it is complete now, we have used it for other purposes, but it is practically so.

Mr. SHAW: There is a deed and a bill of sale, so Judge Haines informs me, on file here in the recorder's office, covering all this property.

WITNESS: Yes, I was goind to refer to that.

Mr. SHAW: Judge Works, will you stipulate that there is a deed and bill of sale conveying by deed and bill of sale from the receiver under this order of court to the San Diego Land and Town Company of Maine, all of the property, real, personal and mixed, of the San Diego Land and Town Company of Kansas?

Mr. WORKS: I have never seen that deed Mr. Shaw. It is rather a broad stipulation to make without knowing what I am stipulating. I have never seen the deed as recorded. I suppose that is so, but I do not know it of my own personal knowledge. If Mr. Boal says that is so I am perfectly willing to stipulate.

Mr. SHAW: Is not that true Mr. Boal?

WITNESS: Yes sir.

Mr. WORKS: That is all right then, we will stipulate it. Of course subject to our general objections heretofore made.

Mr. SHAW: And further, Judge Works, in order that there may be no misconception of this, that it covers the $451,000 mortgage bonds of the National City and Otay Railway Company, and the railroad, the water system, all of their lots and lands situated in this county, including orchards and all manner and charac-
770 ter of property owned by the old company, wheresoever located.

Mr. WORKS: Is that covered by the language in the deed do you think, Mr. Boal?

WITNESS: I think that is what the deed means.

Mr. WORKS: That is all right then.

By Mr. SHAW:

Q. Mr. Boal, do you know B. P. Cheney?
A. I do.
Q. What official position has he if any in this company?
A. He is president of the company.
Q. Was he also president of the old company?
A. He was.
Q. How long has he been president of the new company?
A. I am informed since its organization.
Q. Do you know when it was organized?
A. I do not precisely.
Q. You know that it was organized prior to the first of September?
A. I do.
Q. And he was president at that time?
A. To the best of my knowledge he was.
Q. And on the 16th of September was he to your knowledge?
A. Yes.
Q. Who is president of the old company at the present time?
A. Why I suppose Mr. Cheney is.
Q. President of both?
A. Yes sir.
Q. I would ask you to look at the signature to that letter and state whether that is the signature of B. P. Cheney?
A. It is.

Mr. SHAW: We now offer in evidence a letter dated Boston, September 16th, 1897, directed to Mr. Oscar A. Trippet, as attorney for George H. Hill and Frank A. Kimball, San Diego, Cal., and
771 signed B. P. Cheney, president, and ask that it be marked Petitioners' Exhobot O.

Mr. WORKS: That goes in subject to our objection. We want to make the same objection to it that we made to the other line of testimony.

Mr. SHAW: We understand that it is all subject to your objection. (Reads.)

"Boston, Sept. 16th, 1897.—Mr. Oscar A. Trippet, as att'y for Geo. H. Hill and Frank A. Kimball, San Diego, Cal. Dear Sir: A communication signed in your name 'by Oscar A. Trippet, as attorney-in-fact,' but without date and addressed to the 'officers and directors of the San Diego Land & Town Company of Kansas,' has been received within the last few days by myself and the other officers and directors of this company. The body of the communication is as follows:

'The undersigned stockholders of said corporation, hereby request and demand of you that you institute, or cause to be instituted, proper legal or equitable proceedings in proper courts to set aside and vacate the decrees of the United States circuit courts in and for the districts of Massachusetts and southern California, foreclosing a mortgage and ordering and confirming sale, in the cases wherein H. R. Mandell and another and The Boston Safe Deposit and Trust Company are complainants, and the said San Diego Land and Town

Company is defendant, and you are further requested to bring all proper suits to recover the property of said company from the purchasers at the foreclosure sale and their successors in interest and all proper suits against said directors for an accounting and against the purchasers at said sale and their successors in interest. And you are informed that said foreclosure suits were instituted collusively at the instance and request of the directors of said company pursuant to a scheme and conspiracy of the holders of a majority of the stock in said company, and the said board of directors to
772 defraud the holders of a minority of said stock.

'You are further informed that although well known to the directors of said company that defenses and offsets existed to said foreclosure suit, they failed and neglected to set up the same or in any way defend such action. The following defenses, though well known to said directors, were fraudulently concealed, to wit:

'The bonds sought to be foreclosed in said action were not due on their face and no contingency had happened which made them become due. There was no interest due on said bonds by reason of the fact that the mortgage given by said company to secure their payment provided that the mortgagor should pay all taxes on the mortgage in violation of the laws of the State of California.

'The said directors purchased said bonds at 92½ cents on the dollar and foreclosed them at their face value. The said suits were not instituted in good faith to litigate a real controversy, but merely for the purpose of carrying out the scheme of said directors and majority of stockholders to defraud the minority.

'The said property was purchased at said foreclosure sale by B. P. Cheney, the president and director of said company, and by Walter L. Frost, a director thereof, at a price greatly disproportionate to the value thereof, and pursuant to said fraudulent scheme.

'That the said Boston Safe Deposit and Trust Company, trustee, under said mortgage, acted in collusion with said directors and not in good faith.

'That the receiver in the case of Mandell *vs.* The San Diego Land & Town Company, and who sold said property at said foreclosure sale, was interested therein and acted in collusion with said directors and purchasers.'

I presume this communication was sent with proper authority from you. It seems to be the same in general form as one addressed by you to the officers and directors of this company
773 the last of May of this year, just prior to the sale of the property of this company, which was held on June 14th, 1897. I, personally, being in California at that time with one or two of the other directors, addressed to you a reply in which it was stated that it would be impossible to get any action along the lines indicated by you before the day of the sale then in prospect.

Without waiting for any such action, you, by your attorney, Mr. Oscar A. Trippet, of San Diego, began certain proceedings in various forms in the United States circuit court for the southern district of California, intended, I presume to accomplish the ends which you desire us to bring about as outlined in this present communication,

which, as I say, are apparently the same as those sought by your earlier communications. All the various charges of fraud, collusion, mismanagement, conspiracy, etc. made by you at that time, we expressly showed our willingness to have tried at that time upon any equitable terms if you would take the ordinary course of securing all other parties against lost and damage. You, by your attorney, refusing to do this, the various matters of law and fact were argued before and considered by the court, and the court, in its decision rendered through Judge Ross and with which you are of course familiar, confirmed the sale that had been made, ordered the conveyance of the property as reported by the receiver, and denied your petition for leave to intervene in the proceedings then pending. This decision was, as I say, made after full consideration by the court, and all the facts relating to the matter went on to the record of the court in the various documents, briefs, and affidavits then submitted.

This present communication asks again that the officers and directors of the company cause to be brought proper proceedings to set aside and vacate the decrees of the United States circuit courts foreclosing the mortgages and ordering and confirming the sale, and to recover the property of the company from the purchasers at
774 the sale, and further to bring suits against the directors 'for an accounting' and also against the purchasers at said sale and their successors in interest; although for what reason this last action is to be brought, you do not say, and you charge that the foreclosure of suits were instituted collusively as a part of a conspiracy of a majority of the stock to defraud the holders of a minority.

It is not apparent what further reply we can make to this, so far as the facts are concerned, than was made to the previous communication from you. All of the books and records of this company at this office have at all times been open to the inspection of its stockholders and are still open for their inspection. Full, accurate and regular reports have at all times been made previous to the company passing into the hands of a receiver, and since that time, this company, as a party in interest, has of course seen that regular reports of the receiver have been submitted to the court.

Mr. Kimball, as one who has been a resident of San Diego ever since this company was organized and for many years prior thereto, and also Mr. Hill, as one who has resided for some time each year in San Diego for some years, must both be so familiar with the course of events there and with the action forced upon everybody there by those events, that we cannot believe their charges are made with good faith whatever behind them. The officers and directors of the land and town company, whom you address, have not been in control of its affairs except for the period from about the latter part of April, 1894. As stockholders and employees of the company, however, they have been familiar, as you must be, with its history up to that time.

The company was started in 1881 as one of the outgrowths of the original railroad construction by the Santa Fé system in southern

California, and lay for some years dormant. In 1886–'7, activity
in the West, and especially in southern California, brought
775 about an immediate increase in the business of the com-
pany, and rendered more construction work by it necessary for the handling of its property. Accordingly its capital stock, which had been a million and a half, was increased to two millions and a quarter—this seven hundred and fifty thousand dollars being paid in in cash. Large land sales were made in 1887 and 1888, and some in 1889, and in addition to this money derived from the increase in capital, large amounts derived from such land sales were also spent in construction work, and the water system and railway belonging to the company were built. With what is known all over the West as the 'breaking of the southern California boom' in 1888, land sales dropped off until in 1890 they practically ceased. Those in control of the company at that time, exercising their own foresight, which caused them to act in line with the policy pursued by all others in charge of corporate enterprises there at that time, believed that a revival would be had in the course of a year or two, but, nevertheless, made retrenchments to cut down expenses. This company had incurred debts prior to 1890, and the consummation of certain litigation at that time brought about immediate demand upon it for funds. To meet this demand and to supply money for the conduct of its affairs an issue of five hundred thousand dollars of bonds was duly authorized by the stockholders, and three hundred thousand dollars was placed at 92½ in 1890, and with the funds thus obtained the company freed itself from all its debts and had money left for its operation. All during that period and at all times up to the present time, efforts have been made to sell the land of the company, and various changes, adjustments and reductions in the selling prices have been made. Notwithstanding this effort, land sales have steadily dropped off, and of course you know, as all reasonable men must know, that this is owing to the long-continued depression in southern California and the entire West, and indeed all over the
country, which has rendered the selling of property very dif-
776 ficult indeed. By far the largest part of the property of the
company, as you well know (indeed some twenty-five or six thousand acres our of this thirty thousand or more acres of land) consists of town lots and acreage property entirely unsusceptible of irrigation,—for which class of property there has been, and, as you well know, is now absolutely no sale at any price.

The company was further crippled by the withdrawal of the Santa Fe railroad from National City, which took away a large part of the income from the water system, and seriously crippled the company in all its other operations. Realizing in 1890 that something might be done to develop sales by improving its property, those in control of the company's affairs used some of the company's funds in planting some of these lands that could be irrigated. So long as sales could be made, sales of this property were made upon the lowest basis that would return the company the money it had expended. Sales for that sort of property soon diminished, and it became apparent that the only way possible of preserving anything of the

value of the property for its stockholders—there being an entire cessation of land sales,—was to develop some of the property that could be irrigated by planting such orchards thereon as it might be thought would be profitable; in this way, planning to utilize the investment in the water system and also to furnish business for the railroad.

Pursuant to this policy thus adapted, the management which preceded that coming into possession in 1894, continued the policy of planting.

When this administration came into possession at that time, it found the company with some developed land, no sale for any of its land, and a floating debt amounting to some one hundred and twenty thousand dollars or more. An immediate examination of the property was made, all economies that could be devised were put into operation, and the lands of the company, so far as it
777 seemed to the directors practicable and advisable, again placed on sale at an altered and, in many cases, reduced schedule of prices and efforts have been constantly made to derive income from that source. It is but citing facts well known to you, to say that the depression which has continued so long has rendered any sales impossible at any prices which would have even taken care of a *pro rata* proportion of the debt against the property. This administration paid off the debt of the property by selling the seven per cent. bonds then in its treasury at the same price at which part of the issue had been sold in 1890—which was an extremely good financial operation for the property. Arrangements for further funds were made and a new issue of bonds duly authorized. These bonds were offered to the stockholders in pursuance of a plan in accordance with which the stockholders had put the administration in possession. But one bond could be sold, however, and arrangements were then made for such funds as the company might need, and, pursuant to that arrangement, the company ran along until August 1895, when the death of Mr. B. P. Cheney who had been the only one willing to advance money to the property, made a continuance of that arrangement impossible.

The company was thus confronted with a situation where it had large demands to meet and absolutely no market for its property. Some way had to be devised for protecting the stockholders, or such of them as might be able to join in any scheme for protection. For the safety of all, the property was promptly placed in the hands of a receiver, arrangements made to take care of all pressing needs, consultations of stockholders had, and a scheme presented by a committee of stockholders, which was then thought and which events have proved to have been the only possible one for saving to any of the stockholders any of the value of the property. The scheme, presented by a majority of stockholders, was duly notified to all stockholders, who were at all times kept acquainted
778 with the progress of the matter. Mr. Hill early joined in that scheme, so far as accepting its benefits was concerned, by the accepting of payment of certain bonds of the company held by him, and Mr. Kimball, we are advised, joined in the scheme so far

as consenting that certain of his stock held by the Bank of National City should be deposited, the assessment paid, and added to his debt to that bank. In pursuance of that plan of reorganization, the property was finally sold on June 14th, 1897, for a price which was greater than the market value of all its securities for a year or more prior to its passing into the hands of a receiver, and it is absolutely beyond doubt that the price obtained for the property was greater than could be obtained for it by sale in any other manner. The sale having been an absolute necessity it is difficult to see how any stockholder has been oppressed, and the most that can be said is that the investments of some in this property, as in many other western properties, have been unfortunate.

So far as relates to the defenses and offsets which you say the directors ought to have set up, I would state that you are under a misapprehension when you say that no contingency had happened which made the principal amount of the bonds due. A careful reading of the mortgages will show you your mistake. Such reading will also show you that there is no agreement in the mortgage, that the mortgagor should pay any taxes on the mortgage, and, as a matter of fact, the mortgagor paid only the taxes assessed to it by the proper officer. You say that the directors purchased the bonds at 92½ cents on the dollar, and foreclosed them at their face value. This is erroneous in every way. The bonds were bought by a stockholders' committee and not by the directors, and were paid for by said committee at ninety-five per cent. of their par value with accrued interest.

From what has been said above, it will be apparent to you that the suits were instituted in good faith by parties having a real interest in their determination. It is also clear that the property was not bought by any directors but by a committee acting for
779 a very large percentage of stockholders, both in number and amount of holdings, representing between seventy thousand and eighty thousand out of a total of ninety thousand shares, and that a price was paid for the property greater than could possibly have been obtained for it in any other way. It is quite clear, of course, that the Boston Safe Deposit and Trust Company simply performed its duty and in no way acted in collusion with any directors or anybody else in any fraudulent manner. It is clear, too, and I presume known to you, that the receiver of the property was interested therein simply as a stockholder and as one who was endeavoring, in pursuance of his full duty to the courts appointing him, to protect in every equitable manner all parties interested in the estate, the conduct of which was entrusted to him.

Considering, therefore, all the loose, general charges and allegations you have made, and the facts I have above set out relating thereto, it is apparent that the directors of the company can take no such action as you request. I send a copy of this communication to the personal address of Mr. Hill and Mr. Kimball as well as to Mr. Trippet, and this communication is sent pursuant to the action of the board of directors at a regular meeting held at the office of the company in Boston, September 14, 1897.

Yours truly, B. P. CHENEY, *President.*"

By Mr. SHAW:

Q. Mr. Boal, what was the par value of the stock of the Land and Town Company of Kansas?

A. $2,250,000.00.

Q. What was the par value of the shares of stock?

A. $2,250,000.00.

Q. No, I mean of each share?

A. $25.00.

Mr. HAINES: Judge Works, Major Earle is here.

Mr. WORKS: Mr. Earle will you take the stand?

780 FRANCIS S. EARLE, being duly sworn, testifies.

By Mr. WORKS:

Q. Major, I believe you are one of the consumers under this system?

A. I am sir.

Q. You are one of the parties represented by Mr. Haines, one of the protestants?

A. Yes sir.

Q. Are you one of the members of the committee appointed to represent the consumers in matters connected with the litigation between the consumers and the company?

A. Yes sir.

Q. Was this matter of the application or petition to this board brought before that committee?

A. I understood it was, yes sir.

Q. Was it when you were there?

A. I was there once when I heard of it.

Q. Was the question discussed by the committee as to whether the consumers should petition this board to fix the rates?

A. Not the consumers, I understood it was not the consumers that were going to make the petition.

Q. Was the matter discussed as to whether they should?

A. It was talked of, yes sir.

Q. And concluded that they should not?

A. Yes sir.

Q. Do you know how it happened that the petition was filed by these outside parties?

A. I do not sir at all.

Q. Did you have anything to do with that yourself?

A. Nothing whatever.

781 Q. Were you advised by your attorneys that the consumers should not join in a petition or make the petition to the board?

A. That was the talk.

Q. Were you so advised by your attorneys?

A. Yes sir, I should say we were.

Q. Do you know upon what ground that advice was given?

A. My understanding of it was that it would change our position,

that we had been standing upon the question of contract with the company, that was all.

Q. You were litigating with the company the question in the United States court as to whether you were not entitled to the water at $3.50 per acre?

A. Yes sir.

Q. And it has been your intention to continue that litigation to the end?

A. Yes sir.

Q. And therefore your attorneys advised you not to participate in this proceeding, that it might affect your right in this litigation?

A. Yes sir, that is my understanding of it.

Q. And if this board should fix a rate above the $3.50 per acre, you would still prosecute the suit and claim your rights?

A. We would, yes sir.

Q. You would hold yourselves not bound by any rate that the board might fix?

A. Well I do not know—if the board made the rate we should have to abide by it I suppose unless the case was appealed to the Supreme Court of the United States.

Q. It is the present intention of the consumers to appeal that case to the Supreme Court of the United States no matter what this board does?

A. That is my understanding, to get a general decision on the water business so as to get things straightened out and
782 know where we stand.

Q. Now do you say to the board that you do not know how it happened that these outsiders filed this petition?

A. I know nothing about that whatever.

Q. Has it never been talked about by the consumers, to have somebody else outside to do it?

A. I understood that there was a move that some parties outside were going to put in an application, but who they were I did not know, and I do not know any of the parties.

Q. Did your committee as a committee have anything to do with it?

A. No.

Q. Have you been present at all the meetings of your committee?

A. Not all of them no sir.

Q. Who compose this committee?

A. I think I have a list of them in my pocket. The first committee that was appointed was A. Keen, L. E. Allen, J. M. Howe, Munroe Johnson, J. H. Fassett, myself, F. S. Earle, Peter Morse, who afterwards resigned and Mr. A. M. Howard was substituted in his place.

Q. Who is the present chairman of the committee?

A. Mr. Keen.

Q. Were you chairman at any time?

A. No sir.

Mr. WORKS: Then I have been misinformed, I thought you were chairman.

WITNESS: No sir, I have been acting as treasurer.

Q. Do the attorneys who are here in court representing the protestants act for you in the litigation in the United States court that is going on there?

A. I understood they did, yes sir, that is Messrs. Haines and Rippey.

783 Mr. WORKS: I believe that is all.

By Mr. HAINES—Cross-examination:

Q. Was there a resolution adopted upon this subject by the committee, of having anything to do with this petition?

A. I could not say Judge, whether there was or not.

Q. Who was acting as secretary?

A. I think Mr. Fassett was acting as secretary.

Q. He is not here is he?

A. No sir—I do not remember—we had a good many meetings and there was a good deal of talk, but I do not remember whether there was a resolution or not.

Q. This litigation in the United States court has relation to an attempted raise of rates which the company claims took effect January first, 1896, hadn't it?

A. Yes sir.

Q. And you say it is proposed to have the decision of an appellate court in that case when that goes to final decree?

A. Yes sir, so I have understood.

Q. You do not understand that this board can make any rate now that goes back to 1896 and covers the interval between that time and this time?

A. No sir.

Q. So that that question would not be affected by what the board does here?

A. No sir.

Mr. HAINES: That is all.

By Mr. WORKS:

Q. Major, isn't it your claim that a rate of $3.50 shall prevail for all time?

A. If possible, we would like to have it.

Q. That is what you are litigating isn't it?

A. That is what we intend.

Q. You would not take it to the Supreme Court merely for one year would you?

784 A. No, my idea of taking it to the Supreme Court of the United States is whether we have a contract with the company or not.

Q. To last forever?

A. Yes sir.

Q. And that question, if you would establish it, would do away with this board fixing the rate in the future?

A. I do not know what that would have to do with this board——

Q. That is what you are trying to establish?

A. Yes sir, that is how we started in and lived under for eight years, and I thought made a good contract.

By Mr. HAINES:

Q. Wasn't there another question as to whether the company could of its own motion double the rate that had actually been established and collected?

A. Certainly.

Q. That is one of the important questions isn't it?

A. That is one of the important questions in my mind.

Q. You irrigate under this system?

A. Yes sir.

Q. What is your experience about the comparative amount of water used on your orchard as the trees grow larger—give a description of your orchard, the age of trees and so forth?

A. My orchard is now about ten years old, between nine and ten years old. I used to attend personally to irrigating, four years ago, but since then I have had men doing it for me. Then I was irrigating in basins, almost all my trees were irrigated in basins. I have dropped that method entirely, and am irrigating now with furrows, but my experience, as I have stated to quite a number, was that we were using too much water on our trees, and I candidly—on my flat, I do not think I have irrigated my flat this year but with two good irrigations and a partial third irrigation one part of it. On the side hill I have irri-
785 gated three times, and a slight irrigation about two weeks ago. I do not think honestly that I am using as much water as I did four years ago, not by twenty-five per cent. I should think, in the amount of water; I do not think I am using as much water as that. I think we have all learned a lesson that we have been using too much water and I certainly have had no desire to waste an ounce of water. I think as trees grow older of course their roots grow deeper, and I think, to my mind—I do not know, I may be wrong—but to my mind I think it really takes less to irrigate my orchard of trees of ten years of age than it did when they were four and five. My theory is that the roots being nearer to the surface of course if the ground dries out they must feel the drought, but as the trees grow larger and the roots go deeper the ground is more moist, and to test that I dug down four feet and I found that the ground in my flat particularly was fully as damp as it ought to be, and for that reason I shut off and told my man not to irrigate my flat again this year. I think they irrigated it in September and I am perfectly well satisfied in my mind that it will go right through the rest of the season. I think I could carry my orchard on the flat with two good irrigations per year; I may be wrong in theory but that is the way it looks in practice to me. On the side hill of course it takes more and I have irrigated it three times, and I think possibly it might take four if it was very dry, but I gave it a very light

irrigation about two weeks ago and I shall let it go now for the balance of the season, so that I am satisfied in my mind that I am not using nearly the amount of water that I did three years ago.

Q. Have you any way of estimating the number of gallons you are using?

A. No sir I have not.

Q. What is your best judgment about whether it is more or less than an acre foot of water?

A. Well I could not tell you Judge. I am not scientific
786 man enough to go into your acre foot.

Q. You never used a meter?

A. I never used a meter. They had a meter there once but it was taken away before I bought the place.

By Mr. SHAW:

Q. Have you any idea whether or not the quantity of water you put on your place during the year exceeds 12 inches deep all over the orchard?

A. I do not think it would. I do not think it would be as much as that.

Q. You do not think it would be as much as that?

A. No sir.

By Mr. WORKS:

Q. What is the nature of your land Major as compared with the land of other consumers there, is it low land in the valley?

A. Captain Keen's place and mine are joining and our valley land is adobe land.

Q. The adobe land requires much less irrigation than the sandy soil doesn't it?

A. Yes I think it does.

Q. It holds the moisture much better?

A. Yes sir.

Q. And what is true with reference to your land would not be true by any means with reference to a large part of the lands under the system would it?

A. Probably not, if it was high mesa land I should say not.

Q. What you say with regard to the requirements of trees as they grow older would not be true on the mesa land would it?

A. I have seen lots of this mesa land where the roots could not go over 18 inches or 20 inches without running into hard pan, so they could not go down very deep.

Q. They could not find moisture in the depth?

A. No sir.

787 Q. Supposing there was a depth of soil of four or five feet, that would dry out much more quickly than in your soil on your place?

A. Yes sir I think that is true.

Q. What is true of one man's land is not necessarily true of another man's?

A. Oh of course it would vary.

Q. You are of the opinion that you have not only used more water than was necessary, but that that is true with most of the irrigators under the system?

A. Oh yes, I think I have. I have often talked to Mr. Savage and said I thought they were using more water than was good for the trees. Those heavy rains we had last year gave us more water than we wanted, and as a consequence our lemons were very poor—in January and February.

Q. In that view, don't you think it would be a more reasonable regulation for the rates to be charged for water to charge the consumer so much per thousand gallons upon a reasonable rate rather than to charge so much per acre and let them use all they wanted?

A. The only way to test that would be to try it.

Q. Would not the tendency be to economize on the use of water?

A. Yes sir, I think it would.

Q. A man would not be liable to waste water if he was paying for it?

A. If he were to have a meter that would measure—I have seen meters that would not measure.

Q. Do you mean that would not measure fast enough Major?

A. It measured too fast for me.

Q. They do measure—they measured too fast for me?

A. Yes sir—I had one in Arizona in my mine there, probably it would go along for a week and would — measure at all, and
788 then it would probably measure a hundred thousand gallons at a pop.

Q. You must have had a bad meter?

A. I think it was.

Q. You think from your observation as far as your land was concerned that you could get along and your trees prosper with less than an acre foot of water do you?

A. Yes sir I do.

Q. How much less do you think Major would satisfy your trees?

A. Well, of course it is only guesswork with me, but I should say at least twenty-five per cent. less. I do not know but it might go thirty per cent., but judging from when I have been running the water myself and what I have used, I am perfectly satisfied in my mind that I am not using as much within twenty-five per cent. as I did four years ago. I am very careful of water and always have been.

Q. Do you think all the consumers under the system have learned to use less water, as well as yourself?

A. I think they are learning very fast. I do not think they have all learned yet maybe, but I think they are learning very fast. They tell me there has not been anything like the amount of water used in Chula Vista this year as last, I think fifteen or sixteen per cent. less.

Q. Do you think the raise in rates has had anything to do with it?

A. No sir I think they have found that it is not so good for their lemons.

By Mr. HAINES:

Q. Have you had any occasion to notice how the company was irrigating its lands?

A. No sir I have not. I have never seen the company irrigate a foot.

789 JOHN E. BOAL, recalled.

By Mr. SHAW:

Q. Mr. Boal, will you look at pages 15 and 16, Eighth Annual Report of the San Diego Land and Town Company to the stockholders, at the list of property on those two pages, and state whether or not the property conveyed by this deed of the receiver to the new company is substantially the same as it is there—not with reference to values but I mean as a schedule of property?

A. My best judgment is that it contains this property.

Q. Have you the last annual statement of the board of directors, that I referred to yesterday?

A. I failed to get it from the office last night. I had no time to do so.

Q. The horticultural department has been enlarged has it not?

A. It has.

Mr. SHAW: We offer in evidence the Eighth Annual Report of the Board of Directors of the San Diego Land and Town Company to the stockholders dated December 31, 1894, particularly pages 14, and 16, and ask to have it marked Petitioners' Exhibit L.

IRA HOWE, being duly sworn, testifies.

By Mr. HAINES:

Q. Mr. Howe, you live at Chula Vista?

A. I do.

Q. You are the one to whom this water right was granted by the contract offered in evidence or read from here the other day?

A. Yes sir, myself and brother together.

790 Q. How many acres do you and your brother own on Chula Vista?

A. Twenty acres.

Q. What are they planted to?

A. Lemons, with a few oranges and a few deciduous fruits, different varieties.

Q. Have you had any occasion, or did you experiment with a meter upon your land?

A. I did upon a part of it, with one irrigation.

Q. Eight acres?

A. Eight acres.

Q. How is that planted?

A. It is planted to lemons, a few oranges and a few deciduous fruit trees, set twelve feet apart.

Q. How far apart?
A. Twelve feet—twelve and a half feet.
Q. What age?
A. About six acres four years old last May, and two acres three years old.
Q. How does the number of trees per acre compare with the average number of trees throughout Chula Vista?
A. Well it is nearly double what is usual. Trees were set twenty-five feet apart, and then in between they were put in so that it would be nearly double, if not quite.
Q. It is quite an ordinary distance to set trees twenty-five feet apart each way on that tract, is it not?
A. Yes sir, from twenty-two to twenty-five feet they run.
Q. When did you put this meter on or when was it put on?
A. I think it was the last week in July, 1897.
Q. Well will you state what you did by way of experimenting with the meter?
A. We gave our orchard one thorough irrigation through the meter, a good irrigation.
Q. This eight acres?
791 A. This eight acres.
Q. Did that cover the whole ground?
A. Yes sir.
Q. You say you made it thorough?
A. We did, yes sir.
Q. What was your reason for making it thorough?
A. We wanted to give it a good fair test to determine how much water we were using, it had been a question with us.
Q. What is the character of your soil where you irrigated?
A. The most of it is red soil. There is a portion of it that is of a sandy nature rather, some little of it adobe, about an acre, the balance of it was what you would call—not a light soil, it was a very deep soil most of it. Say on three or four acres of it the adobe comes within 18 inches of the surface, underlaid with adobe.
Q. And the rest of it how?
A. The soil is a little deeper on the balance of it.
Q. What was the result of your experiment as to the amount of water used for that irrigation?
A. I think we used about 86,000 cubic feet on the eight acres.
Q. 86,000 cubic feet?
A. Yes sir.
Q. Have you made a computation to show how many gallons that was per acre?
A. It was 322,500 gallons to the acre, or about that; the meter registers in feet, and it might have varied a few feet from that.
Mr. WORKS: Was that for one irrigation?
WITNESS: Yes sir.
Mr. CHERRY: Did I understand, Judge Haines, that he has his trees 12½ feet apart?
Mr. HAINES: Yes sir.

WITNESS: I got that wrong I guess, 80,625 gallons per acre—
792 that was the full amount I stated first.

Q. How long had that land been lying without irrigation before this irrigation?

A. I think it was just two months, or within a very few days of it.

Q. How often does that land require irrigation in a year?

A. About every two months.

Q. During the irrigating season?

A. Yes sir, during the irrigating season.

Q. And how many irrigations?

A. Three irrigations is all we gave it last year and is all we intend this year; we have just finished, the first of this month, with the third irrigation.

Q. You find that to be abundantly sufficient to properly nourish the trees?

A. We do in our orchard.

Mr. HAINES: That is all.

C. L. JOSSELYN, being duly sworn, testifies.

By Mr. HAINES:

Q. You live in this county Mr. Josselyn?

A. Yes sir.

Q. How long have you lived in this county?

A. Nearly fifteen years.

Q. What occupation have you followed?

A. Ranching and real estate.

Q. Were you in the real-estate business at any time between 1888 and this time?

A. Yes sir.

Q. Are you in the real-estate business now?

A. Yes sir.

793 Q. Did you at any time devote yourself in part or entirely to the sale of lands of the San Diego Land and Town Company?

A. We had their lands for sale as agents, no special agents, but as agents—general agents.

Q. When was that?

A. Commencing from 1886 up until two years ago when we went out of business. I haven't had anything to do with it since the last two years.

Q. Did you receive any instructions from the then general manager, Mr. Dickinson, with respect to representations which you should make or might make to invite purchasers of the land of that company?

Mr. WORKS: We object to the question as being immaterial, irrelevant and incompetent. I suppose the object of this proof is to prove such representations as would bind the company to furnish the water at $3.50 per acre, isn't it?

Mr. HAINES: Yes sir.

Mr. WORKS: I want to preserve my objection to it as I did in the other case. We want the record to show that we reserve an objection.

A. Yes sir I did receive such instructions.

Q. Will you state in substance what they were with respect to the rate to be paid per year for water or the use of water?

Mr. WORKS: Now I wish you would try and give what was said, Mr. Josselyn, if you can remember it, and not your conclusions about it.

A. Objections were ofttimes made and representations made to Col. Dickinson that the prices of the land were high, that is the prices that we were asking them ranged from $250 an acre to as high as $350 an acre. Our instructions from Col. Dickinson in acting as agents in selling those lands was to use this argument, that while the land might be higher than in some other parts of Cali-
794 fornia, the water was furnished under pressure at a low rate, that is at the rate of $3.50 per acre. We were to use that as an argument, and also he wished it to be an advertisement to the country to be a low rate for water to be furnished to those lands—at that time there was no such thing as a water right and it was to be used generally as an argument.

Q. That representation was to be used generally you say?

A. Yes sir.

Q. Did you receive any instructions to advise purchasers that the rate would be advanced by the company later?

Mr. WORKS: Objected to as leading.

Q. Well did you receive any further instructions relating to any possible advance?

A. No sir.

Mr. HAINES: Take the witness.

By Mr. WORKS—Cross-examination:

Q. You say the lands were selling pretty high at that time?

A. Yes sir.

Q. How were they selling as compared with other lands in that same neighborhood owned by other parties?

A. All the lands were selling high sir.

Q. There was no difference between the lands of the company and lands of private individuals selling at that time?

A. There was no difference recognized at that time that we knew of.

Q. There was none—that whole section there was selling at about the same price, the company was getting no more for its lands than the rest of the community was getting for theirs?

A. No sir, only its lands lay near to the railroad or water main—that had a relative bearing upon the value of the land regardless of the owner.

Q. Regardless as to whether it was owned by the company or anybody else?

A. Yes sir.

795 By Mr. HAINES:

Q. At that time what was the policy of the company with regard to furnishing water to everybody?

A. It was furnished freely, and also there was an argument used that whenever water was furnished to land it acted as an easement. Lawyers did not know what the bearings were but supposed when we once became attached to the water mains it was fixed for all times, so far as having rights to the water.

Q. How did lands that were adjoining these lands under the system, but not irrigable from the system rate at that time comparatively?

A. At very much less sir.

Q. What were lands that could not be irrigated from the system worth at that time in the immediate vicinity?

A. Well all the way from forty to sixty and seventy-five dollars an acre largely depending upon the excitement or speculation. Little attention was paid to lands of that kind for development purposes. Lands had certain market values owing to the speculative condition of the market.

Mr. HAINES: That is all.

By Mr. WORKS:

Q. Mr. Josselyn, do you know what the ex-mission lands were selling for that were out of the reach of this system?

A. Yes sir.

Q. Were not they selling up to $150 an acre and even higher?

A. Yes sir, and also lands that were adjoining the land and town company's lands sold for $40 an acre.

Q. It depended very much upon the location of the land, as well as water?

A. Yes sir, at that time though Judge, it was expected that the land and town company's land—that is there was no direct knowledge that it would be so, but there was an implied promise

796 that the lands would be furnished water. I know with our lands that Wallace Dickinson and myself owned sold for $40 per acre, while lands adjoining, better land though, belonging to the land and town company, sold from $150 to $200.

Q. How much would you say that the expenditure of the money by this company necessary to put in this plant increased the value of the land down there per acre, not only of its own but everybody else's?

A. To a great extent it increased the value of all the lands there—do you mean the relative percentage?

A. I mean what did it add to the value of the land by the expenditure of the money, in putting in this system for the benefit of the public there?

A. Lands before the system was talked of sold for $40 to $50 an acre. I bought some for $50 an acre opposite Mr. Griffin's. At that time we were intending to get water by artesian-well systems. Mr. Kimball was about putting a well down. Lands sold then for $50, that was in 1884 or 1885—1885. Then since that though there have been railroads built, an irrigation system put in, which has all added to the value of the land. The same land today probably is worth $200 an acre.

Q. Those improvements that have added to the value of the land have all been made by this company, haven't they?

A. Not altogether sir, because the Coronado Beach road has come in, and the city has grown more. The water improvements have all been put in, yes sir.

Q. The railroad that runs immediately through this section was constructed by this same company?

A. Yes sir, one of them.

Q. There is one of those roads that runs around to the Coronado hotel?

A. Yes sir—that land I am speaking of in comparison is fully as near to the Coronado railroad as the N. C. & O. road—the
797 company's road.

Q. What has been the service on that road as compared to the other?

A. It has been very much poorer, I do not know in fact that there is any service on it now.

Q. It is practically abandoned now isn't it?

A. I do not know that it has been abandoned, but there is no service on it.

By Mr. HAINES:

Q. Has the land not owned by the company changed any in value since the company has withdrawn its virtual offer to furnish *offer* to all lands?

A. Yes sir, it has been very much depreciated, the general market has, of all lands.

Q. How is it particularly with this class of lands that are not owned by the company and to which it has refused to furnish water without the payment of a water right?

A. Well, they have fallen also Judge—the general market has fallen.

Q. How much has it fallen compared to the company's land?

A. Well, owing to these water questions and difficulties with the company's lands, it has practically stopped sales. I have that from the president of the company. That is, he did not say what the reasons were—he said the lands were not selling—but he did not say what the reason was.

Q. But if one were attempting to buy land not owned by the company and not having any water on it, what would be the difference in the range in market value between that class of lands and the lands the company owns with water?

A. Judge it has all fallen very much. The water complications of

the land and town company have been very much more than the general market—that is the last five or six months the water agitation and water trouble of the land and town company has
798 depreciated or made the lands unmarketable more than lands outside. Lands are bringing more frequently, outside of any water complications than they are now in the land and town company's system, but it has all depreciated in value all over this whole region.

Q. But confining it to lands say in National ranch under the flow of the system, what difference of value if any is there between lands not owned by the company and to which the company refuses to furnish any water without the payment of a water right, and the company's lands which they offer to sell with a water right?

A. I do not know how to answer that question Judge. The market has become demoralized altogether on both classes of lands owing to these water complications. For instance, money has been deposited I was informed yesterday by Mr. Reed on a piece of land——

Mr. WORKS: I wish you would not state what you have been told.

Q. I want to know whether the fact that the company has withdrawn its offer to these outside lands has depreciated them or otherwise?

A. Yes sir it has depreciated them very much—very much indeed.

By Mr. WORKS:

Q. Was any land being sold before that occurred in that region, to amount to anything?

A. Well it was very dull Judge, but still there were some sales, and all buyers are very much more sceptical now about buying any lands owing to these water difficulties.

Q. The sales of land had practically ceased down there before that hadn't they?

A. I will not say ceased, but the depression was going on.

Q. Irrespective of this question, the depression had come on?

A. Yes sir.

799 Q. Pretty severely, hadn't it?

A. Yes sir, but still I think it was aggravated by these water difficulties.

By Mr. SHAW:

Q. The value of lands and selling price of lands down there is greater or less dependent upon the water rental is it not?

A. Yes sir.

Q. And when you speak of the construction of that water system enhancing the value of lands, was it not by reason of the fact that the land-owners could get water for their lands at $3.50 per acre?

A. Yes sir, that was a stock advertisement—an argument that we were told to use.

Q. And as the water rents increase the lands depreciate correspondingly, do they not?

A. Very much so, yes sir.

N. H. Downs, being duly sworn, testifies.

By Mr. Haines:

Q. What is your name?
A. N. H. Downs.
Q. Where do you live Mr. Downs?
A. My post-office address is Otay, I live just at the foot of First avenue, Chula Vista.
Q. Have you purchased any land from the San Diego Land and Town Company?
A. I have.
Q. How much?
A. About twenty-four acres.
Q. Did you have any conversation with Col. Dickinson, the general manager, at the time?
800 A. I did.
Q. Any conversation respecting the annual rate for irrigation?

Mr. Works: I suppose it is understood that all this goes in subject to the same objection Mr. Haines, so I need not be taking up time by objecting?
Mr. Haines: Yes sir.

A. I did.
Q. Will you be kind enough to state what it was?
A. I had been looking at other lands with a view of buying and to demonstrate to me that these lands were cheaper where I bought—I could have got lands at about $90 an acre with water on La Mesa, and I had been looking at some lands there at $90 an acre whereas these lands I was looking at were held at $175 an acre, but on the La Mesa lands the water was $6.00 an acre, and Col. Dickinson took a pencil and figured out the difference between the water rate there and on this land and said—he gave the number of years, but I cannot state exactly what it was—and he says There is two dollars and a half an acre difference in the water rate which in a certain number of years would bring this land as cheap as others, and then you have that easement of $2.50 an acre for all times.
Q. Do you mean you would have that or save that?
A. Save that.
Q. Save the $2.50 for all time?
A. Yes sir.
Q. You bought your land, did you after that?
A. I bought my land at that time.
Q. Would you have bought it but for that representation?
A. No sir.

Mr. Haines: That is all.

By Mr. Works:

Q. What company was furnishing water for $6.00 an acre?
A. I understood they called it the flume company. I was a stranger here, I did not know.

801 JOHN M. BALLOU, being duly sworn, testifies.

By Mr. HAINES:

Q. Mr. Ballou, are you the owner of any water under the Sweetwater system?

A. I am.

Q. You are the owner of a water right by contract with the company for it are you not?

A. Yes.

Q. Did you have any talk with any of the officers of the company respecting the rate for irrigation at the time you acquired your right?

A. Well prior to the written contract I had a talk with Wallace Dickinson and Col. Dickinson. My first arrangement was made with Wallace Dickinson. They were to give me a water right for my land at the price charged in Chula Vista for all time—give me a written contract for it.

Q. Do you mean at the annual rate?

A. At the annual rate for the price, and afterwards, I commenced to think that I had better have it definite, that they might raise the rate, so I went to Col. Dickinson and I says, I think after this contract was drawn up, you better change the rate to $3.50. He said, "It is absolutely unnecessary because the rate will never be raised."

Q. Did you mean change or specify the rate?

A. I wanted it specified as $3.50, and he said it was unnecessary to specify it, and convinced me that that was so—and I have no doubt but what he believed it.

Q. Thereupon you made your contract?

A. I made my contract, yes, sir.

Q. Do you know how general that representation was made by the company or its agents, to the public?

A. Well in their little folder they used on the road, that
802 would be along in about 1888, and during that period—I haven't seen one for a long time, but that is my recollection.

Mr. WORKS: Is that the one you introduced in evidence Mr. Haines?

Mr. HAINES: Yes sir.

WITNESS: I don't know whether it is the same one or not, but I used to see it on their folders and advertising matter the rate was advertised at $3.50 per acre.

Q. You didn't see this one introduced in evidence the other day?

A. No.

Q. You saw it as early as 1888 did you?

A. Yes sir, that is my recollection, when they were on the road, they were being handed out to people continually.

Q. They were distributed to the passengers on the road were they?

A. Yes sir, and they had them in the offices where you could help yourself.

Q. Look at this one which I will show you, and I ask whether the matter on the fourth page was similar to that?

A. Yes sir, this is the kind. I have not read it through but I know the one I have read specified $3.50 an acre—I do not know whether that states that or not, but that is the general remembrance of it, and I know that in those days there was no question but what it was a permanent rate.

Mr. HAINES: That is all.

By Mr. WORKS—Cross-examination:

Q. You had a written -ontract with the company Mr. Ballou?

A. Yes sir.

Q. There was no rate specified in that contract?

A. Only the rate charged in Chula Vista.

Q. The rate then being charged was $3.50?

A. Yes, $3.50 an acre.

803 Q. You simply relied upon Col. Dickinson?

A. Yes, Col. Dickinson used to state that that was his pet scheme, and I thought that he would not treat his pet people wrong—I just trusted to his word for it.

Mr. HAINES: I guess I had better put that in. We offer in evidence the fourth page of this as Protestants' Exhibit D.

C. H. RIPPEY, being duly sworn, testifies.

By Mr. HAINES:

Q. Colonel, do you own a tract of land in Chula Vista—or your wife does?

A. My wife does, I do not.

Q. Do you know anything about the contract made with the company with respect to that?

A. Yes sir, I have the contract. I purchased the land for her in her name with her money. I did all the business.

Q. From whom did you purchase?

A. From the land and town company.

Q. Did you have any negotiations with respect to the rates per annum for the use of water for irrigation upon the land, or were there any *b*representations made during the negotiations or before, on that subject?

A. Well yes. I was living in Boston at the time and I heard a good deal about the land and town company there. I came out to look the subject up. There were a great many advertisements of the land of the land and town company here, circulars and things of that kind, and I am quite sure I saw some of them in Boston but I do not remember seeing them, but I came out, and after I returned—I came out here as I remember the first of August and went back on the first of September, 1887. The lands were

804 advertised to be sold for suburban homes and as irrigated lands and suitable for the growth of citrus fruits, and the advertised water rate was $3.00 an acre.

Q. At that time?

A. Yes sir—all the advertisements I saw at that time were at that rate, $3.00 an acre. I engaged orally three lots of the company in September of 1887, three five-acre lots. That is, they were set off for me to take afterwards when I should return. I came back—

Q. About when did you come back?

A. I came back here in January 1888 and brought my family with me and I made a payment on the three lots, but subsequently the contract was cancelled as to one of them, and I got parties to take one of the others, and my wife took the second, disposing of the three. They taxed me something for it—a hundred dollars I believe,—to let go. I could not take the other lots because of the building clause that was in the contract. At that time they would not let the property go unless you would agree to put up a $2000 house in a short, fixed period, as one of the conditions of sale. So far as the water right is concerned, I have the contract if it is of any consequence, that was entered into, but it provided to pay $300 an acre for the land and put up a residence-house within six months from the date of the contract, and that if you did not fulfill your obligations you were to forfeit everything, and so on. It made it a little hard, and made a fellow dance up pretty lively. The pipes were all laid when I was first here, and I moved into Chula Vista in January, rented a house there when the water was first turned on to the tract. The pipes were all laid at that time and my wife's contract was entered into in February, the 7th of February, 1888. I had some talk with Col. Dickinson about the land, and water rates, and he said that the system was going to furnish water lower than any other system, and wanted it understood that way, because they intended to advance their land, they expected to get high prices for the land that
805 they were selling now at $300 an acre; that as an introductory price they had let four or six lots go at $150 an acre but that was all that could be had, and I was too late for those, and that the price now was $300 an acre, and they expected to advance them rapidly, and anticipated getting a thousand dollars an acre, and he wanted it understood that the water rate was an efficient supply of water and a low rate. When the time came to go to the office and make the application for water it was $3.50, and I called the Colonel's attention to it, and he said that they had discussed the matter and that they had thought that $3.00 would be ample, but that in order to make things safe and sure they had concluded to make it a $3.50 rate, and that that was abundant, and that there would be no trouble about that, and they thought it was cheap enough anyhow, and I agreed with him, I thought it was cheap enough also. That is all I know about that. That $3.50 rate was advertised several years after that in circulars and pamphlets and things of that kind. I did not pay a great deal of attention to it.

Q. Now during the time that rate was being advertised, what proportion of the lands under that system that have been sold by the company were sold?

A. I think the bulk of those lands were sold during that time.

Lands sold very rapidly during 1888 and houses were put up very rapidly. Sales began, as I recollect, about the time I was here. I think I was one of the first purchasers outside of four or six lots that had been sold, I do not think there were any other sales. There were people here with me at the time from the East selecting lots and who afterwards came and closed out their contracts the same as I did, and I think the bulk of the lots must have been sold during the year 1888 and not later than 1889. My impression is that there were not very many sales after that time. The company put up a good many houses—I think they improved a good many of
806 their lots by putting up houses—some six or eight houses I think, that they put up. I know the Colonel told me that he got authority to spend $50,000 on houses. I went East with him when I returned to Boston, he went with me in the same car and we had a little talk about things.

Q. Was there anything in that conversation that has any relevancy to this water-rate business?

A. Not to the water rates that I remember, but I remember one thing that the Colonel told me, that made quite an impression. He said that the company had resolved to raise money to put in the water system, and I think that the negotiations or efforts had gone so far that they had the money raised and ready to put the water system in, and paid over to him—he showed me his statement—he was going to make a report in Boston. He was very much elated at the time over the success of things here about the land and town company's business. He told me that he had raised the money himself, not from the sales of land in Chula Vista, but from the sales of the company's lands he had raised all the money necessary and that he did not need the money that the company had raised or was about to raise to put the system in, and pay the bills. He said that he had raised all the money himself or had sufficient on hand from the sales of property. Whether he said actual cash or funds in the way of contracts it is too long for me to remember, but I know as a matter of fact that they did have very large assets in the way of contracts, that when the depression came on were not of much value I guess. I know a great many of them were lost.

Q. Have you had any observation or made any observation of the effect of the use of water and the amount of water likely to be necessary to be used in irrigating trees upon your tract of land?

A. Only such as a man will make by watching the irrigation of his ground from time to time. I have always looked after it somewhat. Several years ago I used to work upon it a great deal
807 myself, but I haven't here lately.

Q. What is your observation of the comparative need of water on trees as they grow older, and as they have grown older?

A. I have had my doubts as to whether any more water was used for the older trees than for the younger—I must qualify that, I do not believe any more water is being used for the older trees than was used for the younger trees, for the reason that it is almost impossible to apply the water to a young tree just exactly where it can be made available. A young tree only spreads its roots a certain

distance about the trunk, and a short distance below the surface, and any water that is on the ground out of reach of the roots is simply wasted, and you cannot apply the water, it is impracticable to apply it just to the extent that it is available, to a young tree, and when the ground is all filled with water as it is there now and filled with roots I think the trees appropriate a very much larger proportion of the water that is actually put on the land. I think nine-tenths of the water that is put on the land for young trees is of no benefit, it is evaporated and sinks into the ground, and my observation is—I got into a controversy here one time about whether there was any loosening up of the soil underneath by irrigation, and I went and did some digging between the trees on the rows where we had been irrigating and on the ground where we had had to put the dynamite to blow out the holes and put the trees in—we could not get the holes dug any other way reasonably—and right in the same rows you could dig with a spade and dig down just as deep as you please, there was an abundance of water in the ground down four or five feet. My own belief is that a large tree sending its roots down deeper and spreading its roots wider gets the water, and that a young tree would not get it. I know from observation down there that there is plenty of moisture in the land now when it has been irrigated for some years, that probably was never moist before. I remember we dug a cesspool at the house, worked days and days at it to get the hole dug, it was so hard, and in
808 the course of three or four years or four or five years afterwards some accident happened to it so we had to dig another off ten or fifteen feet, and I supposed we had another big job, but we had been irrigating across that land and the man just dug right down with the spade thirteen feet without any trouble, it was all moist.

By Mr. WORKS—Cross-examination:

Q. Your experience as a horticulturist has not been very extensive has it Colonel?

A. Oh no sir, I tried to pay more attention to the law, but I only tell what I have incidentally observed there.

Q. You had a written contract for the purchase of your land?

A. Yes sir.

Q. Did it specify the rate per acre, the annual rate?

A. No sir it said nothing about it.

Mr. HAINES: It said nothing at all about it?

WITNESS: No, nothing about water.

Q. You had no written contract for the water at all do I understand?

A. No sir, none whatever.

By Mr. HAINES:

Q. Can you state what your comparative domestic rate and irrigation rate amounted to within the last several years?

A. I have the company's bills, some of them.

Q. Please state what they are?

A. There is a statement and receipt which gives the amounts.
Q. Just read it so far as it relates to the five-acre tract and the domestic rates paid by your family?
A. This is, National City, June 18th, 1895. Mrs. C. H. Rippey, Chula Vista to San Diego Land and Town Company, Dr.—the first item is a little—I got some water to put on a neighbor's land that I was using.
Q. You may omit that, just take the five-acre tract?
809 A. Water rent January 1st to June 30th, 1895, domestic rate at $29.00—meaning yearly—5 acres at $17.50, making $46.50, and the amount due was $23.25. That has been substantially the rate ever since I have been there.
Q. What were the items of your domestic use?
A. That made up that $29?
Q. Yes.
A. The items are, family $12, bath $3, water-closet $6, one horse $4, one cow $4, five acres $3.50 per acre, $17.50, making $46.50.
Mr. WORKS: That is for the year is it Colonel?
WITNESS: Yes sir.
Q. That would be an average for all purposes per acre of $9.30?
A. Well whatever the computation shows.
Q. Can you state anything about what proportion of that water was used for domestic and for irrigation purposes?
A. No, I have not the slightest idea. We just use all we want, and that is all I know.

By Mr. WORKS:

Q. What number have you in the family Colonel, since the rate was changed?
A. Usually four. Sometimes it varies. My family used to be large several years ago.
Q. You have married them off?
A. Married them off and sent them to school.
Mr. HAINES: What has your family been the last three months?
WITNESS: It has been the dog—and she boards around, I believe.
Mr. HAINES: We have some more witnesses of this same character as we have been introducing, as to the representations of the company as to the rates. Of course we might call all the original
810 purchasers for that matter, but I do not care to go into that to the fullest extent. I may call one or two more in the morning, but on that part of the subject we will have to rest for the evening. Mr. Trippet may be ready to go on.
Mr. TRIPPET: Mr. Copeland, will you take the witness stand.

FRED COPELAND, being duly sworn, testifies.

By Mr. TRIPPET:

Q. What is your name?
A. Fred Copeland.
Q. What is your business?

A. Civil engineer.
Q. Were you deputy county assessor?
A. Yes sir.
Q. When?
A. From 1890 to 1897, except in 1895.
Q. Where did you act as assessor, that is in what territory did you serve as deputy?
A. All west of the meridian and south of San Diego.
Q. West of meridian No. 1?
A. West of San Bernardino meridian—National ranch, National City, Chula Vista—Chula Vista is a part of National ranch—Otay—township- 18 and 19 south, and range- 1 and 2 west.
Q. As assessor are you familiar with the values of property in that territory?
A. I think I am, yes sir.
Q. Did you make a study of the values of property?
A. I have, yes sir.
Q. Did you in 1896 assess the property of the San Diego Land and Town Company?
A. In 1896 yes sir.
811 Q. Did you place the value of the improvements on the land?
A. Yes sir.
Q. I will ask you to look at this statement Mr. Copeland. Mr. Reporter this is statement of C. D. Lanning, receiver of San Diego Land and Town Company, National City, California, for the year 1897.
A. That is this year.
Q. Whose signature is this?
A. John E. Boal's.
Q. Did you swear him to that statement?
A. Yes sir, he signed it to an oath.
Q. And you subscribed there as deputy assessor?
A. Yes sir.
Q. As sworn on the 26th day of March, 1897?
A. Yes sir.
Q. Is the distributing system of the San Diego Land and Town Company contained in that statement?
A. Yes sir it is.
Q. Is all the distributing system described there?
A. I expect it is, it is described there——

Mr. WORKS: Never mind, it will show what it describes.

Q. That is part of the statement sworn to by Mr. Boal as containing all the property isn't it?
A. Yes sir.
Q. What is the value placed on that distributing system in this assessment.

Mr. WORKS: We object to it as being immaterial, irrelevant and incompetent. Of course the objection may be made here as it has been in the other cases. We reserve our right.

A. $80,000 is the value placed on it.

Mr. WORKS: I think the statement itself will show what value was placed on it.

Q. Is that a fair cash value Mr. Copeland of that distributing system in your opinion?

812 A. I think so. I can tell you——

Mr. WORKS: You are not asked how.

WITNESS: (Continuing.)—how that was got at if you want to know.

Q. Is the dam assessed?

A. Yes sir.

Q. Were these values of the distributing system and the dam placed in this assessment before Mr. Boal signed it and swore to it?

A. Yes sir.

Q. Do you know whether his attention was called to it or not?

A. His attention was called to it in 1896, I do not know as it was this year particularly. The value of the dam you will find as improvements on the property it stands on, section 3 National ranch.

Q. That is what I am looking for. Did you place the values in this statement of the other lands of the company?

A. All the lands that were in my district.

Q. I ask you whether or not the value placed in this assessment as to the other property of the company is a fair cash value of the property in your opinion?

A. I think it is a fair valur to assess it for, assessed just the same as other lands belonging to other parties, similar to it, adjoining.

Q. Is that a fair cash value for the property in your opinion?

A. I think it is for assessment purposes.

Q. Are the values proportionately equal to all the property in the territory in which you have been assessing the property?

A. Proportionately equal?

Q. Yes.

A. Yes sir, I presume so—they are not equal by any means,

813 but as to the value of the property, I consider——

Q. The values are not equal, but the basis is the same?

A. The basis is the same.

Q. What basis do you use as being the fair cash value, what do you determine to be the fair cash value of property?

A. The law says it should be assessed for what it would be taken for in payment of a solvent debt by a solvent debtor.

Q. In your sworn opinion is that the value you place upon all of this property?

A. Yes sir.

Q. Now I have not the assessment of 1896 here, I do not seem to have brought it. Was the assessment in 1896 different as to the values from 1897?

A. On some property it was. The value of the pipe line was the same.

Q. How about the dam?

A. The dam was the same. The dam has been the same ever

since I have had anything to do with the assessment, and that was arranged between Mr. Shepard and Col. Dickinson in 1890 personally—Mr. Shepard was the county assessor and he made the arrangement with Col. Dickinson himself, and since then my instructions——

Mr. WORKS: Wait a moment.

Mr. TRIPPET: I am not asking for that either.

Q. Did Mr. Boal sign the return of 1896?

A. Yes sir.

Q. And you talked about the valuations placed upon this property at that time?

A. Yes sir.

Q. What was said about it?

A. Well I put an additional valuation that year onto the distributing system because there was a new distributing system built.

Q. How much did you add to it?

814 A. I added $12,000.

Q. Otherwise you adopted the same valuation that had been on it since 1890?

A. Yes sir.

Q. And the same valuation as to the dam?

A. Yes sir.

Q. Did you ever talk to any of the officers about what was the value of this property—of the San Diego Land and Town property—except as to this $12,000?

A. No sir.

Q. You never did?

A. No sir.

Q. Were the values placed in the return of 1896 before Mr. Boal signed it?

A. I think so, I know it was in 1897 and I think it was in 1896. Yes it was in 1896, I know it was in 1896.

Q. How is the land in Chula Vista assessed in regard to the difference between land that has water on it and land that does not have water on it?

A. Nearly all the land in Chula Vista of that same class of land has got water on it; land outside that has got no water on it is generally poorer land, either higher ground, or land of poorer quality.

Q. Is there any difference in the value of the land that has water on it and that which has not?

A. Yes sir.

Q. About what rate of difference?

A. About twenty-five per cent. in the assessed valuation.

Q. Then you assess land that has water on it twenty-five per cent. greater than land that does not have water on it?

A. Just about that yes sir.

Q. What is the rate of assessment over there at Chula Vista for land?

815 A. What is the value?

Q. Yes, what is it valued at?

A. At $100 an acre this year.
Q. That is land with water or without water?
A. Land with water.
Q. And land without water at how much?
A. Well most of the land without water is a poorer quality of land, as I stated, and it is assessed all the way from $25 to $75 an acre.
Q. I will ask you if lands with water on it over there at Chula Vista is not mostly assessed at $125 an acre?
A. No sir, there is not an acre there that is assessed at $125.00.

Mr. HAINES: You are mistaken about that Mr. Copeland.
Mr. *Copeland:* I would prefer that you let the witness testify.
WITNESS: I have not assessed an acre of land there this year at over $100 an acre.

Q. You say the assessment has been reduced this year?
A. Yes sir, it has been $125 an acre, but this year it is $100.
Q. What years did you make the assessment over there, state that again?
A. In 1890, 1891, 1892, 1893, 1894, 1896 and 1897.
Q. What is your best opinion as to whether or not the values were placed upon the property before the officer swore to the return? Was that your custom as an officer, to place the values in before the return was sworn to?
A. Yes sir.
Q. Are you of the opinion that you did that in all these years, as to the San Diego Land and Town Company's return?
A. Well I think the first year I did not put the valuation on myself, I think it was done in the office, but whether it was done before or after it was signed or not I cannot state.

816 Mr. TRIPPET: Take the witness.

By Mr. WORKS—Cross-examination:

Q. What changes have been made in the valuation since you first made the assessment Mr. Copeland? I am speaking now with reference to the dam and the distributing system.
A. There was a change in 1896 from the distributing system at $68,000 to $80,000.
Q. That is the only change that has been made in all those years?
A. That is the only change.
Q. How many years have you assessed it?
A. Six years.
Q. It is your opinion that it has remained at precisely the same value all these years has it?
A. I think so, except 1896 and 1897.
Q. That was by reason of some addition being made to it?
A. That was by reason of addition in the pipe line.
Q. What was the addition that you assessed at that time, pipe line No. 2?
A. Pipe line No. 2.

Q. You assessed that at $12,000 did you?
A. Twelve thousand dollars.
Q. Did you know how much it cost?
A. No not exactly, I have an idea what it cost.
Q. What was your idea of what it cost?
A. It cost in the neighborhood of sixty thousand dollars.
Q. And you assessed it at $12,000?
A. Yes sir.
Q. How did you get at that value?
A. I asked Mr. Burt and he told me to assess it proportionately as the other had been assessed.
Q. Then you did not attempt to get at the actual value of that new pipe line at all did you?
A. No, I took it under Mr. Burt's instructions to assess it
817 proportionately to the cost of the whole.
Q. Then you did not exercise your own judgment as to the value of it at all did you?
A. No sir.
Q. Why do you tell the board that that is your judgment as to the value?
A. Yes sir.
Q. That is your judgment is it?
A. Yes sir.
Q. You got your information as to your judgment from Mr. Burt as to what value to put upon it?
A. Yes sir.
Q. What makes you think that pipe line that cost $60,000 is not worth more than $12,000?
A. Because I do not think it would sell for more than that.
Q. That is the way you put the value on it, at what it could be sold for?
A. That is the way I put the value on everything.
Q. Is that the way you put the value on that?
A. I put the value on that as I told you under Mr. Burt's instruction.
Q. Then you did not put it on the actual value of it but on what somebody else told you to assess it, is that the idea?
A. That is the idea.
Q. How do you know what the property could be sold, for, have you known of any property of that kind being sold in that neighborhood?
A. No.
Q. How did you arrive at your conclusion then as to what it could be sold for?
A. Simply my judgment in the case.
Q. Upon what is your judgment based?
A. Because I do not think such property is very salable.
818 Q. Have you ever known of any property similar to that being sold in the market at all Mr. Copeland?
A. No sir.
Q. Or know what it could be sold for?

A. No sir.
Q. Now did you know about what the dam cost?
A. Yes sir.
Q. How much?
A. I know what they said it cost, I do not know of my own knowledge what it cost.
Q. Well about how much?
A. Well I do not know now that I can tell you just what it did cost.
Q. About $237,000 wasn't it, in that neighborhood?
A. My recollection is somewhere in the neighborhood of $300,000.
Q. You had that information when you made this assessment didn't you?
A. I never placed any valuation on the dam except by the instruction of my employer.
Q. Now what property did you assess on your own judgment?
A. All the lands and all the improvements on them.
Q. Well I am speaking about this water plant. Did you place any valuation upon it on your own judgment?
A. No sir.
Q. You did not know what its value was when you assessed it did you?
A. I do not think anybody can know exactly what the value is.
Q. You did not even exercise your own judgment, but simply put it down at what somebody told you to put it down didn't you?
A. Certainly.
Q. Is that the only knowledge you had upon which to base your valuation?
819 A. The only knowledge I had was my instructions.

Mr. WORKS: That is all sir.

Pending the further hearing of this matter, the board adjourns until tomorrow morning at nine o'clock.

THURSDAY, *October 14th*, 1897—9 o'clock a. m.

Mr. SHAW: We now offer in evidence, by stipulation, the testimony of C. S. Alverson in the case of The San Diego Land and Town Company *versus* City of National City *et al.*, in the circuit court of the United States, ninth circuit, southern district of California.
(Reads testimony as follows.)

C. S. ALVERSON, being called as a witness for the defendants, and being duly sworn by the special examiner to testify the truth, the whole truth, and nothing but the truth in this case, now testifies as follows:

By Mr. GIBSON:

Q. State your name, age, residence and occupation?
A. C. S. Alverson, 46, civil engineer, San Diego, California.
Q. What experience have you had as a civil engineer, and how long have you practiced your profession?

A. The greater part of my life I have been engaged on surveys and civil engineering. My experience on the coast dated from 1876. Since that time for several years I was engaged on public surveys and the examination of public surveys in California, Nevada and Arizona. The greater portion of that time my work led me
820 through the irrigated and mining portions of California and Nevada, and during that time I collected a great deal of information and data in reference to water systems, as relating to flumes and ditches and plans for hydraulic work. Since 1886 most of the time I have been in southern California engaged principally in hydraulic engineering.

Mr. WORKS: Since what date Mr. Alverson?

WITNESS: Since 1886. During that time I have served in the capacity as assistant engineer of the San Diego flume; as engineer for the International Company in Lower California, in the examination of lands and possible water systems; and as chief engineer of the Pamo Water Company; as engineer in charge of the Lake Hemet Land and Water Company; as chief engineer of the Linda Vista irrigation district and engineer in charge of the Escondido dam which is completed and known as the property of the Escondido irrigation district. I am also a charter member of the American Society of Irrigation Engineers.

Q. Are you familiar with the San Diego Land and Town Company's water system situated in this county? If so, state what familiarity you have with the system?

A. Since 1886 I have visited the dam and have been over the water system quite a number of times, and as a hydraulic engineer I have taken interest in the system, as well as other systems throughout the United States, and even other countries, and have endeavored to keep myself posted on the permanent water systems throughout the United States and more particularly on those that are local situated mainly in southern California. And as such I have examined the system and think that I am reasonably familiar with it in a general way. Ever since the commencement of this suit I have been present at most of the testimony and have followed the testimony, and have also examined the topographical map of National ranch which is given here as Complainant's Exhibit No. 5 I think.

821 Q. You will please state in your judgment as a hydraulic engineer, what amount of water can be stored and used from the Sweetwater system as it existed prior to February 20th, 1895?

A. The amount of water that can be obtained by run-off or other means from any water-shed that is tributary to a stream is dependent on a great many different conditions, and in my examination of water-sheds in southern California it has extended to the water-shed naturally tributary to the Sweetwater reservoir.

The water-shed tributary to the Sweetwater reservoir is varied in its character. Beginning at the Sweetwater dam at an elevation of about 150 feet above sea-level it rises with different slopes to an elevation of about 5000 feet near the summit of the Cuyamaca moun-

tains. The upper portion of the water-shed to a great extent is favorable for a large per cent. of run-off from flood waters, and to be brief, taking the system as a whole it should furnish a considerable quantity of water to be stored in the Sweetwater reservoir. But in the calculations that I have made I have assumed that the data given by Mr. Savage, the engineer for the company, is correct, with certain reservations which I will explain hereafter.

The first thing to be considered is the amount of evaporation which should be charged to the reservoir. The company since 1888 has had instruments at the dam for the purpose of measuring the evaporation, and taking their figures the average may be taken as 58 inches in depth per annum. But, in considering the amount which should be charged to the reservoir I do not agree with Mr. Savage, for the following reasons. Assuming that the reservoir at the beginning of one season is full, prior to that time the company would be taking water out of the reservoir for irrigation and domestic use. The evaporation has been going on, but the flo*o*w waters have filled the reservoir, and were in excess of the amount taken out. And after the flood waters, or the amount of water flow-
822 ing into the reservoir is not sufficient to compensate for evaporation and the amount that is being taken out, still there is some flowing in, which is apparent by testimony given in this case. This should be credited to the storage capacity of the system.

Assuming that the second year is a very dry year and that the time that the rainy season begins and water begins to flow into the reservoir the water surface of the reservoir has reached its lowest stage. From that time on water is flowing into the reservoir, and water is being taken out. The rainy season continues, and the flood waters increase and exceed the amount of water that is taken out, and at a certain time the water surface in the reservoir reaches its maximum elevation, and this is taken as the water stored during that season.

The evaporation for the second year, that has taken place in the reservoir prior to this time, should not be charged to the available duty of the reservoir, and on this basis I have assumed that the proper depth of evaporation to be charged to the reservoir per annum to be 48 inches.

The next point to be considered is the amount of water that has been or can be stored in the reservoir from the run-off of the water-shed. I have to rely to a great extent on the data furnished by the complainant in this case with regard to the amount of water that has been actually stored, and I have no doubt but what it is correct, except the reservations that I have named and hereafter name.

Q. Proceed and give the amount that can be stored and used?

A. Mr. Savage, the engineer for the company, in his testimony stated that in the winter——

Mr. WORKS: I object to the statement of what other witnesses have stated.

Q. State the amount, and then you can state your method of reaching your conclusion.

823 A. The manner in which I have arrived at this conclusion I do not think would cut any figure.

Mr. WORKS: Then you had better leave it out. In quoting Mr. Savage you may or may not quote his exact language. It is objectionable anyway to incorporate it in that way.

Mr. GIBSON: You must not enter into an argument upon it, but you may state upon what you based your calculations, upon Mr. Savage's testimony or upon the testimony of any of the witnesses in the case.

Mr. WORKS: Oh yes, you can do that. I object to his quoting Mr. Savage.

A. The winter of 1893–'4 was the driest season known to this country for a period of about twenty years. I have arrived at this conclusion from data showing the amount of rainfall taken in San Diego and other portions on this water-shed and contiguous to the same, and from the best data that I have been able to obtain, the net storage of the Sweetwater reservoir in the winter of 1893–'4 was about 500,000,000 gallons. Presumably in the year 187– there was a winter in which the storage would probably have been about the same. In all intermediate years and from data obtained there is no reason to suppose but what the amount of water that was or could have been stored in the Sweetwater reservoir considerably exceeded these amounts. It would appear then that it is possible that once in twenty years we may look for an extreme dry season. Intervening in this period there may be other years which are ordinarily dry and in which the rainfall is only normal, and in making my calculations as to the available amount of water that can be stored in the Sweetwater reservoir, I consider that an extreme dry year which in all probability will not occur only once in twenty years should not be taken into consideration, for the reason that the necessity of providing for a year of this character would entail a considerable additional expense to the cost of the dam and would also cause to be stored

824 in the reservoir a considerable quantity of water for which the company has no use for nineteen years, and on that assumption I have taken the next lowest amount of run-off from the reservoir, which I have been enabled to determine. That from the best data which I have been able to obtain is about two billion gallons. Prior to February 1895 the storage capacity of the Sweetwater reservoir to the top of the dam was given as 5,882,278,000 gallons, add to this 2,000,000,000 gallons, making a total of 7,882,278,000 gallons. The total evaporation for the two years as figured on the basis which I take would be 1,140,400,525 gallons; the available water for use would be 6,741,877,575 gallons or for one year 3,370,938,787 gallons. Taking a basis of 350,000 gallons per acre per annum this would irrigate——

Mr. WORKS: We object to that part of the answer as not being responsive to the question. The witness has his answer written down, it seems.

WITNESS: No I haven't it written down. It is simply the calculation. (Exhibits paper.)

Mr. GIBSON: We will withdraw that latter part and ask another question.

Q. The amount that you have given there as being the available capacity for one year, was that the amount that was available on and prior to February 20th, 1895?

A. As I have figured it was.

Q. Has the capacity of the dam been increased in any way since then, if so, state how and to what extent?

A. I visited the Sweetwater dam several days ago and found that there had been improvements made since I last visited it. With reference to storage, the improvements were the reinforcing of the parapet wall, and leaving a space in the center of the dam about 200 feet in length of the same height as originally, but thicker and heavier. The remaining portion of the top of the dam has been raised to an elevation of about 21 inches above the top of the parapet wall in the center, and this wall has been extended into the sides of the canyon so as to prevent damage from floods. The wasteway has been enlarged and pipes have been put in for
825 the purpose of controlling the flood waters in case of an excessive rainfall. Prior to February 1895 the water could not be safely stored above the top of the dam, but since these improvements have been made the water can be stored to the top of the parapet wall in the center of the dam. This would increase the storage capacity of the reservoir about 912,000,000 gallons. That is approximately, the exact area that would be flooded by increasing the water surface three and one-half feet I do not know.

Q. State the amount of land that can be irrigated from the available capacity of the reservoir as it existed in February, 1895, first on the basis of 350,000 gallons to the acre.

A. I have estimated that the available quantity of water in the reservoir for irrigation and other purposes is 3370787 gallons. That divided by 350,000 would give the result of 9631 which would be the acreage.

Q. Are you familiar with the amount of water that is necessary *per capita* for domestic purposes. If so, state what it is?

A. In a certain way that is a difficult question to answer. I have data from something over 200 cities in the United States extending over a period of forty or fifty years, and there has been considerable difference in the quantity of water used *per capita* in the different cities, depending on various conditions. In the Eastern States cities of ordinary size use a less amount of water than in cities of greater population. On the Pacific coast where irrigation is an important factor in the consumption of water it would be naturally the reverse for the reason that when the settlements in a town or city are scattered and considerable area of ground is used for the raising of various crops, if this is charged to city use then it increases the amount *per capita*.

Q. Well leaving out of consideration the amount used for irriga-

tion and taking into consideration the ordinary uses for
826 which water is used in a city, state what the *per capita* amount is in your judgment?

A. From 30 to 50 gallons in a city of less than 5000 inhabitants.

Q. Does that mean per day, per week or per month?

A. Per day.

It is admitted that there is no sewer system in National City.

Q. You know National City, the territory called National City?

A. Yes sir.

Q. In this county—do you know the manner in which the inhabitants are distributed over it?

A. I am generally familiar with it.

Q. Well taking into consideration the manner in which the inhabitants of National City are distributed over its territory and that such inhabitants number in the aggregate about 1300, and that the city has no sewer system, and consequently there is no demand for water for sewer purposes within the boundary comprising the city, what in your judgment would be a fair allowance *per capita* for domestic purposes, exclusive of irrigation uses within that territory?

A. Do you mean to exclude irrigation entirely—just for household use?

Q. Yes, excluding irrigation and including all domestic purposes such as supplying water for drinking purposes, ordinary household purposes, the watering of stock, and the use of baths, and any other uses that may occur to you for domestic purposes?

A. About 30 gallons.

Q. Now did you in that estimate include water that might be used for mechanical purposes?

A. Which estimate?

827 Q. This last one that you have made, of 30 gallons *per capita?*

A. I did not.

Q. When you speak of *per capita* you mean per day do you not?

A. *Per capita* per day.

Q. Now you have given the duty of the available amount that the reservoir would store in February 1895 as 9631 acres. What additional acres could be irrigated from the 912,000,000 gallons that can be stored in addition to the available capacity of the reservoir as previously stated, by reason of the improvements made thereon since February 1895—on the basis of 350,000 gallons to the acre?

A. Estimating on the same basis the storage for the two years would be 8,794,598,640 gallons.

Q. What is that?

A. The evaporation due to an increased area of water surface exposed would increase somewhat, but I have estimated the evaporation for the two years to be 1,205,566,375 gallons, which taken from the total amount leaves a net amount of 7,589,032,265 gallons or for one year 3,894,516,132 gallons.

Q. State the area that that amount will irrigate, on the basis of 350,000 gallons per acre?

A. It would be 11,127 acres.

Mr. WORKS: Do you mean it adds that much?

WITNESS: No, that is the total amount.

Q. You heard the testimony of Mr. Savage, the company's engineer, with reference to the duty of the system, did you not?

A. I did.

Q. I mean the duty of the system, including the reservoir. Now assuming that the amount of water available for use in the reservoir as given by Mr. Savage is correct, do you find any discrepancy in his statement in regard to the amount of land that could be irrigated, and if so state what?

828 Mr. WORKS: We object to the question as being immaterial, irrelevant and incompetent and asking the witness to criticize the testimony of another witness, and not asking him to state the facts.

Mr. GIBSON: We want him to state the facts wherein there is a discrepancy or discrepancies.

A. Mr. Savage in his testimony estimated the available amount of water stored to be 2,443,536,000 gallons. This on the basis of 350,000 gallons per acre per annum would irrigate 6980 acres.

Q. Well does that amount differ from the amount of acreage he gave as being the available duty of the system?

A. He stated in his testimony——

Mr. WORKS: We object to the witness stating what was stated in the testimony of some other witness as being irrelevant, immaterial, incompetent and improper.

Mr. GIBSON: We will withdraw that question and put this one:

Q. Assuming that Mr. Savage testified that the available duty of the reservoir was 6000 acres, in what respect does such statement differ from the fact?

Mr. WORKS: We object to the question on the ground that it is immaterial, irrelevant and incompetent and asking the witness for a conclusion and comparison and not for the facts.

A. The basis of irrigation as given has varied considerable, but in the calculation made in general it has been assumed at 350,000 gallons per acre. The people may or may not have used water to an excess of that. If they have it would irrigate a less amount, but if they used only 350,000 gallons per acre per annum it should irrigate as I have stated, 6980 acres.

Q. What effect does the furnishing and delivery of water at the elevation of 140 to 165 feet above sea-level have upon the duty and available capacity of the various pipe lines in the Sweetwater system as they existed on and prior to February 20th, 1895?

829 Mr. WORKS: Objected to on the ground that it is immaterial, irrelevant and incompetent, and asking the witness for an opinion as to a matter upon which he is not shown to have any personal knowledge.

A. In constructing any system of water works it is necessary for the constructing engineer to know the character and conditions which exist, and the uses to which the water is to be applied.

Mr. WORKS: We move to strike out the answer just given, on the ground that it is not responsive to the question and is immaterial, irrelevant and incompetent.

Q. Well, taking this system as it existed on and prior to February 1895 what effect would the delivery of water at an elevation of from 140 to 165 feet above sea-level have upon the duty and available capacity of the pipe lines? Never mind giving your reason, just give the fact and let them get the reason by cross-examination.

A. The elevation of the outlet pipe above sea-level is about 145 feet, at the Sweetwater reservoir. The supply-pipe has a diameter of about 36 inches for a distance of about 1500 feet. Then it is reduced to a 30-inch pipe, which continues down the valley for something over five miles. If you desire to deliver water at the lower end of the 30-inch pipe at an elevation of 90 feet above sea-level and with no pressure head on the pipe at the dam—in explanation, I mean that the pipe is simply covered with water at the dam, and there is water back of it sufficient to keep the pipe running full—the capacity of the 30-inch pipe line to deliver water at an elevation of 90 feet above sea-level would be about 19½ cubic feet per second, or 975 miners' inches. Under the same conditions at the dam, and delivering water at an elevation of 140 feet above sea-level at the lower end of the pipe, the capacity would be about 6 cubic feet, or 300 miners' inches, or less than one-third. Assuming a head
830 of 20 feet on the pipe at the dam and delivering water at an elevation of 90 feet above sea-level at the lower end of the pipe, its capacity would be about 22¾ cubic feet or 1137 miners' inches. Under the same conditions at the dam, namely 20 feet head of water on the pipe and delivering water at the lower end of the 30-inch pipe at an elevation of 140 feet above sea-level, the capacity would be about 12½ cubic feet, or 625 miners' inches—a little more than one-half. This illustrates the effect of delivering water at varying elevations.

Taking the 18-inch pipe line running through National City, approximately three miles in length and you desire to deliver 3 cubic feet of water per second at the lower end of the pipe, then the loss of head due to friction *about* be about 12 feet. Continuing along the 12-inch pipe line which extends to a distance of about one mile to the point where it leaves the limits of National City, to deliver one cubic foot of water at the lower end of the 12-inch pipe, there would be a loss of head due to friction of about 4½ feet. Taking the 12-inch pipe line extending through the ex-mission tract, a distance of about three miles, and desiring to deliver one-fifth of a cubic foot of water at the lower end, the loss of head due to friction would be about 3½ feet. Then in order to deliver one-fifth of a cubic foot of water at the lower end of the 12-inch pipe line it would necessitate an additional head of about 20 feet throughout the entire system, above the elevation of the point of delivery. This is assuming that

you deliver at the end of the 18-inch pipe line and the end of the 12-inch pipe line where it leaves the limits of National City the quantities of water which I have designated. This would be true in regard to any of the elevations above certain points throughout the system.

Q. What do you mean by hydraulic head in order to overcome friction. Do you refer to the friction caused by the passage of the water through the pipes?

831 A. Yes sir, if there is a head of water on a pipe at its intake and the pipe is extended to an indefinite distance there is a point at which water will not flow out of the pipe even, although the lower end may be several feet below the intake or the pressure head. This is due to loss of force caused by friction in the pipe or conduit.

Q. What hydraulic head would be necessary to be maintained above the intake of pipe line No. 1 to make that pipe line reasonably effective for the conveyance of water through it to the various points at which it is delivered for use?

A. That is dependent upon the amount of water that you distribute through the system before reaching the extremity of your laterals, and also on the amount of water which you delivered at the extremity of these laterals, and the elevation at which that water is delivered.

Q. Well taking into consideration pipe line No. 1 as it existed in February last, with the various elevations to which it is designed to deliver water. How much of a hydraulic head would be required above the point of intake?

A. If you desire to deliver one-fifth of a cubic foot of water at the lower end—when I say lower end I mean the end at which the water is distributed, the other end of the pipe would be considered as the beginning of the pipe—then in order to deliver 1/5 of a cubic foot of water per second at the end of the 12-inch pipe line in what is shown on Complainant's Exhibit No. 5 as Horton's subdivision of of ex-mission tract, and at an elevation of 160 feet, it would be necessary to maintain a head of water at the Sweetwater dam of an elevation of 180 feet above sea-level.

Q. Supposing that pipe line extending into the ex-mission tract were cut off at the point where it leaves the National City boundary on the north, would it reduce the hydraulic head that you have referred to?

A. It would.

832 Q. Or have any material effect upon it? If so, how much, or to what extent?

A. To deliver the water to an elevation of 160 feet at the northern limits of National City?

Q. Yes, sir. Supposing the pipe were cut off at that point and not extended to the higher elevations outside in the ex-mission tract, would it reduce the hydraulic head necessary to force water through the pipe to the elevation of the northern boundary, given at 65 feet?

A. It would materially. The exact amount I have not got. I

have not any tables of the capacity of pipes here and I could not give it.

Q. The same would be true with regard to all laterals extending to elevations above that would it not outside of the city?

A. It would have the same results, subject to the conditions I have named.

Q. What effect upon the capacity of the pipe does the extension of laterals to an elevation of say from 140 to 163 feet have?

A. In order to deliver water through these laterals you have to maintain a head at the dam equal to the elevation at which the water is delivered, plus the loss of head due to friction in the pipes.

Q. Which would be how much?

A. It varies according to the size of the pipe, the character of the pipe, and the amount of water you desire to deliver, and the elevation. There is no regularity.

Q. Taking into consideration the condition of pipe line No. 1 as it existed in February 1895, and excluding the extension into exmission tract on the north, would the pipe line deliver the available capacity of the reservoir or not? If it would state in what manner the water would have to be distributed in order to effect such a result?

A. Theoretically the pipe line would deliver a given quan-
833 tity per second per hour or per day. As to its available duty that depends on the manner in which you distribute the water. With a pipe line it is an important factor whether you maintain a large capacity at all times, or whether the water is distributed in rotation. If you were delivering say 20 cubic feet of water, or were liable to be called upon to deliver 20 cubic feet of water, then if you maintain a system which will deliver this 20 cubic feet of water at any and all times there would be considerable additional cost. If delivered in rotation the size of the pipe and the cost of the system would be materially diminished.

Q. State whether or not that pipe, if used in rotation as you term it, would deliver the available capacity of the reservoir as it existed in February last, and taking into consideration the fact that a constant pressure in the pipe is needed to supply domestic use in addition to irrigation?

A. It would be difficult to answer the question direct for the reason that the available duty of the reservoir depends on the length of time in which you distribute the water. If you were to distribute all the water in the reservoir in one month it would require a very large system. If you distribute it in six months it would require a great deal smaller system, or if you distributed it in 365 days a still smaller system.

Q. Well assuming that the irrigation season extends over a period of 200 days and that the use for domestic purposes extends over 365 days and that the whole number of persons to be supplied by domestic use is about 2500 people inside and outside of National City?

A. It would not, unless the water was distributed in rotation.

Q. What do you mean by rotation?

A. The greater portion of the water under this system is used for irrigation. It is not necessary that land should be irrigated every day, but only at stated intervals dependent upon the character of the soil, and the character of the crops which are irrigated,
834 and in order to distribute water, especially in a pipe system, in an economical manner, it is necessary to deliver that water in rotation, or the system will cost a great deal more than is in accordance with good engineering. It is the almost universal custom throughout southern California in water systems where the conditions are similar to those which exist in the Sweetwater system, to irrigate in rotation. If the system were supplying water entirely or nearly so for domestic and municipal purposes then it would be different.

Q. Then in your judgment as a hydraulic engineer, if the water for irrigation were distributed in rotation—that is to say different sections at different times—pipe line No. 1 would be sufficient to distribute the available capacity of the reservoir as it existed in February last, would it not?

A. Not entirely.

Q. State to what extent it would fail to do so.

A. In my judgment it would irrigate between four and five thousand acres of lands lying in Chula Vista and National City, and furnish also the water required for domestic use, providing the water was not delivered at too great an elevation above sea-level.

Q. If National City contains one-fifth of the irrigable area under irrigation and receives 21.24 per cent. or say 22 per cent. of the amount of water furnished by the system and yields one-half of the revenue received by the company for furnishing water and assuming the original cost of the plant, that is to say, the dam, and reservoir and pipe line No. 1, to be as stated by the witnesses for the complainant, what would those various proportions bear to the cost of the system as stated in the manner that I have referred to? In other words what would be the proportion of the stated cost chargeable to National City?

Mr. WORKS: Objected to upon the ground that the question is unintelligible and contradictory, upon the further ground that
835 it calls for an opinion from the witness upon a question about which expert opinion cannot possibly be given; and on the further ground that the question and the evidence sought to be elicited is immaterial, irrelevant and incompetent; on the further ground that the question asks the witness to determine a question of law as to what proportion of the expense should be borne by National City.

A. That is a hard question to answer without some calculation.

Q. Well make your calculations.

A. I prefer to take a little time.

Mr. GIBSON: All right, we will pass that. Take your time and make your calculation.

Q. In your judgment could the Sweetwater system consisting of

the dam and pipe line No. 1 as it existed on February 20th last—what could it be duplicated for?

Mr. WORKS: We object to the question on the ground that it is immaterial, irrelevant and incompetent.

A. From my knowledge of the cost of materials and the cost of labor that existed at the time of the construction of the system and the prices at the present time, I should say that the system could be duplicated for about two-thirds the original cost.

Mr. GIBSON: You may take the witness.

By Mr. WORKS—Cross-examination:

Q. When do you say you commenced practice as a civil engineer?

A. I have engaged in that more or less since I was eighteen.

Q. When did you commence active work as a hydraulic engineer?

A. Well as stated in my testimony-in-chief, at the time I was engaged on Government work, beginning about 1876 and extending to 1885, while I was not directly engaged in hydraulic work I was in the section of country in which there were a great many hydraulic works and appliances and it would be my intention to devote my time principally to hydraulic engineering, and I gathered a great deal of data and information.

836 Q. Be kind enough to answer my question. When did you commence the active practice of hydraulic engineering?

A. Active practice in 1886.

Q. Where did you commence work?

A. On the San Diego flume.

Q. In what capacity did you act there?

A. Assistant engineer.

Q. Who was the chief engineer?

A. Lew B. Harris at first, and afterwards J. M. Graham.

Q. How long did you work in that capacity?

A. As assistant about twelve months.

Q. What was the nature of your work?

A. It was the location of the line.

Q. Flume line?

A. Flume line, and in charge of construction.

Q. What construction?

A. The construction of the flume, the trestles, and in the survey and examination of the Cuyamaca water-shed.

Q. To what extent did you take part in the survey of that water-shed?

A. I made a survey entirely around the water-shed and computed the area.

Q. Did you do anything else in connection with the water-shed except the survey of it?

A. No sir.

Q. What else did you do as assistant engineer of the flume company?

A. I laid out a portion of the La Mesa tract, ran the flume lines and pipe lines from La Mesa tract, and from the present La Mesa reservoir to Teralta.

Q. Do you regard the surveys of those lines, the surveying of the lands and the running the lines of the water-shed as hydraulic

837 engineering?

A. Yes sir, I do.

Q. What is that?

A. In a certain sense.

Q. In what sense?

A. In the sense that any engineer whose profession it is and who intends to make it his profession in the future, that not only devotes his time to performing the work required of him but also in acquiring knowledge and information in regard to the particular system on which he is employed, and of water systems in general.

Q. If I understand you the only work you did there was to locate this line of the flume, making the survey of the water-shed and survey of some of the lands of the flume company? What had that to do with the quantity of water that might be secured from that water-shed or the amount of water that might be stored in a reservoir, or anything connected with the matters about which you have given an opinion in this case?

A. It would have no particular bearing.

Q. It would have none at all would it?

A. Oh yes—wait a moment until I answer the question.

Mr. WORKS: I did not intend to interrupt you.

A. The work itself does not give the engineer any particular information, but as I have stated in the previous answer—in the answer to the previous question—that he is or should be—and I was—all this time engaged in collecting data and information in regard to this water-shed and other water-sheds.

Q. I am not speaking about what you were doing outside of your work for the flume company. My question is what this particular work you did for the flume company would have to do with the matters I mentioned in my last question.

A. No special bearing only in reference to that system and

838 the work performed.

Q. When did you quit work on the flume, or for the flume company?

A. It was in the spring of 1888.

Q. Where did you go from there?

A. I remained in San Diego a few days, and then was engaged by the International Company in Lower California.

Q. In what was the company engaged at that time?

A. They were engaged in subdividing and surveying lands.

Q. It was not a water company at all was it?

A. It was in one sense.

Q. In what sense?

A. For my instructions were at the time I was making the surveys of the land and getting the topography of the country and ex-

amining the grant lines, to look to the advisability of developing water and placing it on those lands.

Q. Did you make any surveys with that view?

A. Yes sir.

Q. To what extent?

A. I made an examination of the San Vicente river which is below Ensenada, and also on the San Ramon river which is near San Quintin.

Q. Did you make any written reports or estimates as to the water supply or anything of that kind, as a result of your work there?

A. There was nothing only the notes that I took in the making of the examinations and surveys, and verbal report that I made to the general manager.

Q. Were there any developments in that direction as a result of your work?

A. There have been none at the present time.

Q. How long were you engaged there?

A. Well I was engaged at different periods for I think
839 about a year and a half, and actively engaged about two-thirds of that time.

Q. Where did you go from there?

A. For about a month I was assistant engineer for the Pamo water system and after that was appointed chief engineer.

Q. How long were you engaged for the Pamo Water Company?

A. I was continuously engaged in the field about a year and a half. After that I was engaged in office work several months and at different times subsequently I was called upon to make examination and reports on the system.

Q. What amount of developments or construction was done by that company?

A. There was very little actual construction done.

Q. Was there any?

A. No it would not be considered any construction.

Q. Then where were you employed after the determination of your employment with the Pamo Company?

A. I was engaged as engineer in charge of the Lake Hemet dam and flume and pipe lines.

Q. Where is that dam?

A. The dam is situated about 25 miles from the town of San Jacinto. It was formerly in San Diego county. It is now in Riverside county.

Q. Had the works been completed before you went there?

A. No sir.

Q. In what state were they?

A. In regard to the dam the preliminary surveys for the reservoir site had been made, and an approximate location had been made of the dam site. Some of the appliances for constructing the dam were on the ground, and the excavation had been partially made for the dam.

Q. Who was the engineer in charge before you?

A. The preliminary surveys were made part of them by
840 Mr. Vail and other portions of them by an engineer from Los Angeles, I have forgotten his name at present. At the time that I was employed Mr. Schuyler was the consulting engineer.

Q. Of what size and capacity was that dam and reservoir?

A. The dam was constructed to a height of 110 feet with a cross-section, capable of carrying it up to 150 feet. The capacity of the reservoir at the 150-foot contour was something over eight billion gallons.

Q. Was Mr. Schuyler the consulting engineer during the entire construction of the plant?

A. Yes sir, he was there sometimes once in a month, sometimes once in two months.

Q. Who made the preliminary surveys and estimates as to the capacity of the reservoir and the source of supply, if anybody?

A. The preliminary estimates were made previous to my employment up to the 120-foot contour. Afterwards I made the survey personally up to the 150-foot contour, and from my notes Mr. Schuyler and myself made the computations as to the area.

Q. What was the source of supply?

A. The source of supply is the South fork of the San Jacinto river and what is called Hokey creek coming from the summit of the San Jacinto peak. These two streams unite in the reservoir and flooded portion, as it has been and will be.

Q. How long were you in charge of the work of that company?

A. I was employed in December 1890 and remained continuously in the employ of the company until in the spring of 1892.

Q. Were the works completed when you left the company's employ?

A. Not entirely.

Q. When did it commence to supply consumers with water?

A. They were supplying consumers with water prior to the construction of the dam.

Q. In what way?

841 A. To explain so it will be plain I will state that the reservoir has an elevation of about 4300 feet and the water is delivered into the natural bed of the stream and carried down the stream for some distance and is there taken up in a pipe line and by means of this pipe line and flumes and ditches is distributed on the land at the upper end of the San Jacinto valley, and prior to the commencement of actual construction on the dam a portion of these pipe lines had been constructed and water was delivered in such quantities and at such times as was available in the stream.

Q. Was that reservoir fed by a living stream?

A. There was water flowing in the stream at all times that I have observed it.

Q. Well to what extent were they furnishing water to consumers up to the time you left the employ of the company?

A. I could not state the exact number of acres.

Q. Well, could you give us some idea Mr. Alverson?

A. If my recollection is right I think they were supplying about 100 inches of water.

Q. Did you have anything to do with the actual delivery and supply of the water or was your work confined to construction?

A. My work was confined to construction and in that connection I almost entirely planned the sizes of the flume and the system as it was constructed afterwards. Mr. Schuyler was absent during that time and after I had planned it and it was partially constructed he came there and approved the manner in which it had been built, and the general plans.

Q. Where did you go from there Mr. Alverson?

A. I returned to San Diego.

Q. What employment did you take after that?

A. A portion of the time I was making some surveys and examining water systems throughout the county.

Q. For whom?

842 A. For different parties.

Q. Well, name them?

A. For the San Diego flume, and looking over to see by what means they could increase their supply, and also for the Minneapolis Beach Colony Company and the Hedionda Creek Company.

Q. Where is the Minneapolis Beach Company's property?

A. It is at Carlsbad.

Q. Did they do any development there under your supervision?

A. Not so far. Negotiations are pending with them now. I am furnishing them data in regard to the system.

Q. What employment have you had since then?

A. A considerable portion of my time since leaving the Lake Hemet Water Company other than what I have stated, has been in the employ of the Linda Vista irrigation district, which is the same system or they are owners of the same system which was formerly the Pamo Water Company; also as engineer in charge at the Escondido dam in this county.

Q. What amount of construction has been done by the Linda Vista irrigation district of which you were the engineer?

A. There has been very little actual construction. There have been surveys made of the reservoir sites and examinations of the water-shed and sources of supply, and I have made estimates and have drawn plans of different kinds of dam, conduits and pipe lines.

Q. Well they have done practically no construction have they, actual construction?

A. No.

Q. That is worth mentioning?

A. No.

Q. Now you say you were engineer in charge of the Escondido irrigation district?

A. Yes sir, at the dam.

Q. For how long?

A. For several months.

843 Q. Was any water delivered to consumers while you were in charge there?

A. They were just beginning to deliver water when I left.

Q. Then they were not engaged in the delivery of water when you were in charge there?

A. No.

Q. When did you first give any attention to what you call the contributory water-shed of the Sweetwater reservoir?

A. In 1886.

Q. What was the extent of your investigations at that time? I am speaking now of personal investigations, not the procuring of data from the outside.

A. I understand. While engaged with the San Diego Flume Company I passed through and over a considerable portion of the water-shed contributory to the Sweetwater river in going to Cuyamaca and other portions of the country, and as an engineer obtained what data I could, and noticed the general character and formation of the country.

Q. What data did you obtain at that time?

A. In crossing the stream at different seasons of the year, sometimes in the summer months and sometimes in the rainy season, I observed the flow of water in the stream and the conditions of the stream these different times of the year.

Q. Anything else?

A. Only the general physical characteristics of the water-shed as regards the surface, whether covered with soil or whether rough, broken and rocky?

Q. How much of the entire water-shed contributory to the reservoir do you think you actually passed over, was it more than simply passing through it in traveling to and from your work?

A. Well my work took me on nearly all of the higher peaks and summits, and with the natural eye and by aid of the field glass I could get a better idea of the general formation of the water-shed than in any other way.

844 Q. Had the Sweetwater dam been commenced at that time?

A. Well it was in progress of construction at that time.

Q. In 1886?

A. Not in 1886.

Q. Was not that the date you gave?

A. That was when I commenced, but this period of travel extended——

Q. You are giving now the entire time are you?

A. Yes, not only then but since then, the entire time from 1886 until the present time.

Q. Well can you give anything else as having been discovered by you during that time as to the water-shed and what it would supply?

A. Well I hardly know how to answer that question. I have stated previously that as an engineer I always am noticing anything

in regard to a particular water system, and water systems in general, accumulating data and information.

Q. Well do you think you can tell with any degree of accuracy the amount of water that can be stores from a water-shed of that kind from simply passing through it and over it and examining it by the eye or with glasses?

A. I can to a certain extent.

Q. Well to what extent?

A. To arrive at your conclusions in the manner in which conclusions are arrived at on this point you have to take into consideration the elevation and character of the water-shed and in that connection the general surface of the water-shed, whether it is rolling, whether it is steep and abrupt, whether it is covered with a heavy growth of vegetation and trees or if it is rocky and precipitous, and also the general condition of the channel to the point at which you desire to store that water.

Q. Now isn't it true Mr. Alverson that at last an opinion given upon that subject must depend very largely upon data that
845 one obtains outside, as to the extent of the rainfall, the actual flow of the stream during the season, and other things that you did not obtain from actual knowledge and investigation?

A. No sir, I think my information in general is very good on that water-shed, as well as several other water-sheds in this country.

Q. Then you think that without any reference to the rainfall as shown by water gauges kept for that purpose you could tell with reasonable accuracy what the water-shed could supply do you?

A. No sir I did not claim that, nor I do not claim you could if you had the rainfall.

Q. You cannot do it any way, can you, Mr. Alverson with any degree of accuracy?

A. Only to a certain extent.

Q. It is largely a matter of guesswork isn't it, necessarily?

A. Yes. Each water-shed depends upon itself to a certain extent. There are certain elements which enter into consideration which are applicable to all water-sheds but each water-shed is dependent largely upon its own characteristics.

Q. Isn't it true that you have given your opinion here largely upon what information you have obtained from the testimony of other witnesses here as a basis of your opinion?

A. No sir, only as to the actual quantities claimed to have been stored.

Q. And that is the most reliable thing at last isn't it?

A. Certainly, it would be in all cases.

Q. Well it is in all cases isn't it, as well as should be?

A. If it is correct.

Q. I say the actual storage, if it is the actual storage, it is accurate, isn't it?

A. Yes, if it is the actual storage it is accurate.

Q. Do you think Mr. Alverson that the opinion given by an
846 engineer no matter how capable he may be, is worth very much when it comes in opposition to actual experience in operating a system of that kind?

A. That depends a great deal on how the system is operated. If operated on the line on which he bases his calculations probably his opinion would be of considerable value.

Q. Well you have given your opinion upon the line of actual experience of this company haven't you as a basis?

A. To a certain extent.

Q. To a very large extent haven't you?

A. On certain matters I have.

Q. Well what matters in particular and what not?

A. In reference to the storage capacity of the Sweetwater reservoir and in reference to the total annual evaporation on the surface of the reservoir, and in reference to the length and sizes of the pipe lines and the elevations at which the water was delivered, and in making my estimate as to the duty of the reservoir I have taken the quantity to which the consumer was entitled per acre as a basis of my calculations.

Q. That is a pure matter of figuring isn't it?

A. Yes sir.

Q. It can be done as well by any one else as by an expert?

A. No it cannot.

Q. Why not?

A. Simply because unless a man is familiar with the rules by which you determine the capacity of pipe lines it is impossible for him to determine the capacity or the amount of water which those pipe lines will deliver at different elevations or the difference in their capacity due to delivering water at different elevations.

Q. Well if you take the facts established here, that the reservoir has the capacity of five billion gallons of water, that that supply is reinforced to the extent of two billion gallons, and that there
847 is 48 inches of evaporation, and the consumer is entitled to 350,000 gallons of water, it is a pure matter of calculation isn't it as to how many acres the reservoir can supply under these circumstances?

A. Those calculations are.

Q. Now I understand you to say that you think Mr. Savage is in error in his estimate of 58 inches of evaporation in the reservoir?

A. No sir I do not.

Q. He is correct in that isn't he? The only distinction you make is that that quantity should not be charged up against the reservoir because it is supplied by the flowage of water from above, is not that so?

A. That was not the way I stated it.

Q. Well will you be kind enough to state in what respect you differ from Mr. Savage in that particular?

A. In my testimony I stated that assuming the basis that the reservoir is full at the beginning of a season and that the company is taking water out of the reservoir before it reaches that point, and that evaporation is going on, and yet notwithstanding the flood waters are sufficient to fill this reservoir, that the amount taken out and the evaporation that occurs during that time should not be charged to the duty of the reservoir.

Q. Leaving out the question as to the amount of water taken from the reservoir or the amount flowing in, what do you say about the extent of the evaporation. Do you disagree with Mr. Savage then?

A. No I would not, materially.

Q. In offsetting or reducing the amount of evaporation do you take into account at all the amount of water that flows into the reservoir, or only the water that is taken out of it?

A. In my estimate I take no account of the water that flows into the reservoir after the time at which the water surface reached its maximum elevation, only so far as it would compensate for slight loss, in the case of a pipe line, in transportation, and other causes.

Q. If I understand you, on arriving at the duty of the
848 reservoir you take the full capacity of the reservoir to be five billion gallons to start with. Am I correct about that?

A. No sir.

Q. What do you take?

A. Five billion eight hundred——

Q. Well I am stating in round numbers.

A. Yes, in round numbers.

Q. Then you add to that two billion gallons—speaking again in round numbers—that will be replaced by the flowage of water from above. You deduct from that 48 inches for evaporation. You then divide the amount by 350,000 in order to determine just how many acres can be supplied. Is that the mode of arriving at it?

A. Well in general it is correct.

Q. If I have not stated it correctly explain?

A. The evaporation is determined by the average area of exposed water surface, not the entire area.

Q. I understand that.

A. With that exception it is I believe correct.

Q. Have you made any deduction in that estimation for wastage or loss, after the water leaves the reservoir?

A. I have not, for——

Q. Well you have not have you?

A. No I have not. That is for the reason that in the case of a pipe line that is in good condition and kept so there should be very slight loss from leakage or evaporation.

Q. Do you think then that practically every inch of water that leaves that reservoir can be carried to and supplied to the lands and that no deduction should be made for either leakage or wastage in the hands of consumers?

A. There is some slight deduction made.

Q. Well you have had no actual experience in supplying water to consumers have you personally?

849 A. Personally I have not. Let me explain.

Q. Certainly. Go on Mr. Alverson.

A. During all these years I have obtained data from superintendents and from men in charge of the distribution of water and of the methods in which the water is distributed and in the manner in which the irrigator used the water, and other information, for the

purpose of determining as near as I could the duty and best way of distributing water.

Q. That has been purely a matter of hearsay and not personal experience?

A. It is not hearsay.

Q. Why not?

A. That is in the true sense of the word, because it is taken and based on information which it is reasonable to suppose is correct.

Q. Do you know anything about what the percentage of loss is in supplying consumers on account of the wastage and over use by consumers themselves?

Mr. GIBSON: Objected to as incompetent, irrelevant and immaterial. It is no concern of the company what the consumer does with his water after it is delivered to him, and the company is not bound in delivering water to allow for any shortage or wastage on the part of the consumer.

A. There is no regularity. It depends upon the character of the conduit through which the water is conveyed, the manner of measuring the water and whether the seller of the water allows the consumer to use more than he is entitled to.

Q. Do you remember of having obtained the information from the superintendent or manager of any company at all similar to the land and town company with reference to this particular matter?

A. Do you refer to the loss due to the transportation of water and the distribution of the same?

850 A. Loss after it leaves the reservoir, yes sir.

Q. The principal information in southern California in regard to that I have obtained not from the superintendents themselves but from their reports and the reports of the State engineer and the Hemet water works, by personal observation, and by the information of the superintendent of water, I obtained data on those points.

Q. Do you remember with reference to what companies?

A. The companies in Riverside and San Bernardino counties.

Q. In those cases their supply of water is furnished almost entirely from living streams and mainly through open ditches is it not?

A. By various ways. A portion of the lines are open ditches, some of them paved and some of them unpaved. Some of them are pipe lines a portion of the way. A lot of them the pipe lines are in good condition, others leak.

Q. In arriving at your estimate Mr. Alverson did you take the statements as to the yield of the water-shed as it has been testified to here by Mr. Savage?

A. I did, with the reservation as regards evaporation which I have stated.

Q. Well as to the actual yield of the water-shed you did take his statement?

A. In general.

Q. Well in general—in what particular did you go beyond it?

A. Only in regard to the amount of evaporation that should be charged to the reservoir or the available duty of the reservoir and the water that was flowing into the reservoir after it had reached its maximum elevation.

Q. Well if you take the testimony of Mr. Savage as to the actual yield of the water-shed, what had your own knowledge or investigation as to the water-shed to do with it?

851 A. It furnished me a general idea of the characteristics of the water-shed, and the probable yield.

Q. That simply confirmed what Mr. Savage had said about it, did it?

A. Well no, the yield of the water-shed is lower than it should be, compared with other water-sheds on the Pacific slope.

Q. Then to that extent you have not taken his statement, you have taken your own judgment of it rather than his statement?

A. No not in my calculations.

Q. Will you be kind enough to answer whether you have or have not taken his statement as the basis of your estimates here so far as the mere yield of that water-shed is concerned?

A. I have.

Q. I understand you to say that for the year 1893–'4 the actual yield was probably five hundred million gallons, but you take an ordinary or average year as a basis for your calculations do you, in taking two billion gallons as the amount by which the reservoir is reinforced?

A. I have not taken the average year. I took the approximate quantity as given by Mr. Savage as the storage since the construction of the Sweetwater dam, except in the winter of 1893–'94.

Q. Then in your judgment an extremely dry season ought not to be taken into account in an estimate of this kind, because to provide for such a year would be bad engineering?

A. Where the water is used largely for irrigation I would not. If it is used principally or entirely for domestic use then the conditions might change.

Q. Then you think the company ought to conduct its business in such way that if an extremely dry year comes the consumers or some of them must suffer for the want of water?

A. In order to answer that question clearly I will have to make some explanation.

Q. Go on.

852 A. As I stated, a year like the winter of 1893–'4 is not liable to occur oftener than about once in twenty years. If you take the next lowest storage which is obtainable from the best data, then figuring on that basis and making your calculations subject to those conditions you have provided for nineteen years out of twenty. In the case in question if you were to use the full supply which you considered safe the first year based on the minimum storage being about two billion gallons, and at the beginning of the irrigation season of the second year in which there had been a year like that of the winter of 1893–'4 you found that you would only

store the amount of water given as about five hundred million gallons then you would have to reduce your supply to the irrigator about one-third. My reasons for considering that a company should not be required to provide against an extraordinary year is that it is more economical for the consumer to have a good crop for nineteen years and have a short crop the twentieth, and receive his water for a less price than to pay more for his water during the entire period covered by the twenty years. If the full amount of water which the consumer is allowed in this case is sufficient to irrigate his land and the crops which he raises, then if that is reduced one-third for one year his crop may be short for that year, but his trees or plants are not permanently damaged, no more than they are if a tree bears a large amount of fruit one year and exhausts its strength and it has to rest the next year. The second year it is as good as it was before.

Q. How would you manage in a case of that kind, Mr. Alverson, to make the reduction equal to all consumers in the absence of a universal use of meters?

A. In distributing water it necessarily follows that you must or should have some system of measuring that water approximately, and you can measure two-thirds of the amount of water as well as you can measure three-thirds, whether by meters or other means.

Q. You have given your opinion with reference to the dif-
853 ficulty of supplying water to the higher lands under this system at some length. I infer from what you say that the substance of your opinion is that for the company to attempt to supply water to lands say at the elevation of 160 feet or higher would be detrimental to the consumer generally?

A. It certainly reduces the capacity of the system, and in order to deliver its water there it would necessarily entail an additional cost.

Q. In other words you would have to have a system that would furnish a larger pressure in order to reach those elevated lands, by enlarging your pipes or otherwise?

A. In the case of the ex-mission tract and the tracts in Otay in this case that would be the result.

Q. That would be the result in any case, the greater the pressure the larger your pipe must be, as a rule?

A. As a rule.

Q. From your knowledge of the system there and what you have heard in reference to it, do you think it would be advisable or economical for the company to attempt to supply water above the 120-foot contour line, in justice to the consumers as a whole?

A. Not continuously. They could supply, a portion of the time, water to a greater elevation without injuring the consumers probably, to a great extent.

Q. That would make it necessary to make their supply intermittent, wouldn't it?

A. It would.

Q. And to that extent it would be detrimental to the consumer?

A. To either make it intermittent or in the case of an extreme dry year to reduce the quantity of water furnished to consumers.

Q. And in either event it would be to that extent detrimental to the consumer generally wouldn't it?

854 A. If that were the case every year or every two or three years, it would be, but in the case which I have testified to, once in twenty years, I do not think it would.

Q. Well, do you think it would be good policy for the company in justice to its consumers generally to attempt to furnish water to that elevation where there are lands needing water below that level?

A. No I should not. I desire to answer that question a little more fully.

Q. Certainly, if you want to explain.

A. The elevation to which water can be delivered under the Sweetwater system in an economival manner—and this is true in any pipe system—is dependent on the elevation to which you deliver the water and the elevation of your supply or intake. In the case of the Sweetwater system, with the water at the lower elevations in the reservoir there is not a great difference between that and the elevation to which you supply the water; and in constructing any system of pipe works it is necessary and is important in a pipe system to take this into consideration, the difference of elevation between the point of delivery and the supply, and there is a limit to which you can deliver water economically, as I have shown in my previous testimony in the case of the 30-inch pipe. At one elevation it delivers less than one-third of what it would at another elevation, and the elevation to which it is economical to deliver this water depends upon the amount of land you are irrigating and the length of your pipe lines and the distance from your supply, and for these reasons in my judgment I do not consider it advisable nor proper to deliver water to a higher elevation than 140 feet in the further portions of National City and Chula Vista.

Mr. WORKS: That is all.

By Mr. GIBSON:

Q. In giving your experience with the Hemet Dam or Reservoir Company did not your duties consist in directing the con-
855 struction of the dam and ascertaining the capacity of the reservoir at various elevations and contours?

Mr. WORKS: We object to the question on the ground that it is leading.

A. It did.

Q. Of what does the duty of a hydraulic engineer principally consist, digging the trenches and putting the pipe in place, or laying out and planning the work and ascertaining the capacity of pipes and the means of delivering water into them and distributing water from them?

A. The duties of a hydraulic engineer are various.

Q. Give us some of the duties that he is supposed to perform?

A. The first thing necessary is to determine the uses to which the water is to be applied, then to consider the quantity of water that it is necessary to develop, the quantity of water which in his judgment and from data obtainable can be developed in an economical manner, and knowing the use for which the company proposes to use the water, he plans and constructs the system, specifying the kind of conduits, class of material, and after construction begins he superintends the work in general and sees that it is carried out in accordance with what he considers good engineering.

Q. Well it is all dependent isn't it upon a knowledge of the means for impounding or receiving water and distributing it to the places and persons where it is used?

A. It is—on his general knowledge and upon data obtained from engineering and scientific works, and the result of works in different portions of the country.

Q. What business was the San Diego Flume Company engaged in when you worked on its conduit?

A. They were engaged in the development of water and the construction of conduits for the purpose of conveying that water to lands under the system.

856 Q. Well have they since distributed water through these works or any portions of them?

A. They have.

Q. And are they still doing so?

A. They are.

Q. What was the water delivered from the Hemet reservoir used for?

A. It was used for irrigating lands in the upper portion of the San Jacinto valley.

Q. Well is it not also used for domestic use?

A. It is.

Q. How is that conveyed to the places of use, in open ditches wholly, or in pipe lines?

A. It is conveyed in pipe lines, paved ditches and flumes.

Q. What is the water from the Escondido reservoir used for?

A. It is used for irrigating the lands in the Escondido irrigation district and for domestic use in Escondido, and by the inhabitants occupying the lands in the district.

Q. What do you say the capacity of the Hemet reservoir is?

A. It is something over eight billion gallons at the 150-foot contour. If you desire I can get you in a moment the estimated quantity.

Q. Never mind—of what did your work consist in connection with the Pamo reservoir?

A. It consisted in surveys of the reservoir and examination of the water-shed, the running of lines to determine the most feasible and best routes, and in the location of about eleven miles of land from the Pamo reservoir——

Q. Line of what?

A. Flume line and pipe line, from the Pamo reservoir to what is

known as Winn's pass, and the running of preliminary lines to the city of San Diego, and in various directions, to determine the most available route and the elevations of the different summits,
857 passes, and other data which it is necessary to obtain in order to construct the system in a proper manner.

Q. Did it comprise the location of a dam site and the preparation of plans for a dam? If so, state.

A. I drew up several plans, some of them based on a masonry dam, some on a loose-rock dam, with different cross-sections, also—which I omitted in my testimony-in-chief—there was considerable excavation made at the dam in order to determine how far we would have to go to get to bed rock. I also took measurements, gauged the stream, the flow of water at different times during the year.

Mr. GIBSON: I believe that is all Mr. Alverson. We may think of something hereafter.

JOHN E. CLOUSE, being duly sworn, testifies.

By Mr. HAINES:

Q. What is your name?
A. John E. Clouse.
Q. Where do you live?
A. Chula Vista.
Q. Do you own property there?
A. Yes sir.
Q. How many acres?
A. Ten.
Q. From whom did you acquire that or buy it?
A. From the land and town company.
Q. From the San Diego Land and Town Company?
A. Yes sir.
Q. What price did you pay for that land?
A. The first five acres I bought in the summer of 1889 I paid $400 an acre—$450 but got a rebate of $50 when there was some trees set on it, then at the end of I cannot remember, a year
858 or two years, $400 an acre was the actual cost.
Q. And the other five acres how much?
A. There were improvements on it that I paid for outside of that.
Q. Did you make an estimate as to the price of the land in your dealing with the company?
A. Yes sir.
Q. And on the improvements separately?
A. Yes sir.
Q. For the land what was the estimated price?
A. $400 an acre.
Q. What year was that?
A. 1889, the summer of 1889.
Q. Is that the second five acres?
A. No sir, the first five.
Q. When did you engage for the second five acres?

A. I think about three years ago, I am not certain.
Q. At what price?
A. $700 an acre.
Q. Was that improved to some extent?
A. Yes sir, it was all set out.
Q. Did you make a valuation upon the land itself in your negotiations as apart from the improvements, the trees?
A. I believe not.
Q. Had the whole of it been set out, the second five acres?
A. Yes sir, two acres of it had been set out just before I bought it, just a little while, the other had been set out I think three years.
Q. The company had been irrigating it had they?
A. Yes sir.
Q. Now will you state anything that was said between you and the company in your negotiations about the price of water per annum?

859 A. Well in the price of the land, I suppose I kicked the same as the balance of them that it was very high, but the inducement that was given me was on account of the water that it was cheap, and I supposed for all time to come, was the inducement that was throwed out to me.

Q. Well what was said to you upon the price of water at the time, what argument was used if any by the company for this high price of the land?
A. It was $3.50 per acre.
Q. Can you give the conversation—with whom did you have it?
A. The first five acres was with Col. Dickinson.
Q. Give it as nearly as you can as to what was said?
A. The idea was——
Q. What was talked between you and the company?
Mr. WORKS: What was said, if you can remember what was said.
A. I do not know es I can remember the talk now.
Q. Did the Colonel say anything to you in answer to your objection to the price of the land?
A. Well the answer to my objection was the low price of water.

HENRY GULICK, JR. being duly sworn testifies.

By Mr. HAINES:

Q. What is your name?
A. Henry Gulick, Jr.
Q. Where do you live?
A. At Chula Vista.
Q. Did you buy any land from the San Diego Land and Town Company?
A. Yes sir.
Q. How many acres?

860 A. Well we first bought twenty, that we do not own now, and the present home place consists of twenty—four five-acre lots.

Q. When did you buy that?

A. The first or this latter?

A. The latter, the twenty-acre lot where you now live.

A. That was contracted for five years ago, six years ago this last June.

Q. Did you also buy any other land from the company?

A. Yes sir, at that time we bought twenty acres of land situated in a different quarter section.

Q. By we, you mean Gulick Brothers?

A. Yes sir, Gulick Brothers.

Q. Your brother and yourself?

A. Yes sir.

Q. What was the price of this twenty acres upon which you now live?

A. Well that was figured when we made the arrangement, as a trade; it was a contract, but it was based upon the price of $350 an acre, but I might add that the deed which we got in settlement about one year ago, a little over one year ago, was made at a less price. It has a house on it, and I asked Mr. Boal something about it, but I believe it was not explained fully to me just why the figures were made less.

Q. Does that $325 an acre include the price of the house?

A. No.

Q. That is for the land itself?

A. Yes sir, for the land itself.

Q. When did you buy the other land you speak of?

A. That was contracted for in 1890.

Q. And at what price was that?

A. That was at $350 an acre less finally after some discussion the streets were taken off—approximately—and if I remember
861 correctly it was about $330 an acre, or $333 an acre.

Q. As Chula Vista is laid out the streets are made part of the lots?

A. Yes sir.

Q. That is with a ten-acre lot, part of it is a street?

A. Yes sir, depending upon whether it is upon the corner or not—but one side is anyway.

Q. In other words, the ten-acre-lot line goes to the middle of the street—or any other lot line?

A. I believe that's the way it is.

Q. Now did you have any conversation with the company respecting the rates for water at the time of these negotiations for this land?

A. We did when we purchased the first twenty acres.

Q. Will you give what it was?

A. Well it lasted some time, some few weeks, with Col. Dickinson.

Q. What if anything was said bearing upon the water, in the matter?

A. We objected because the deed did not contain anything in regard to the water question, but were told that none of their deeds did, and when we asked him about the future as to the probable

change as to the rate, he replied that if such a thing ever did come to pass the board of supervisors would probably be the ones to change it.

Q. What was the rate talked of between you?

A. $3.50 per acre.

Q. Did he say anything about the policy of the company as to making any change of rates or otherwise?

A. He did, he came to Pomona where we were living then to finally settle the matter, and in the discussion he made the statement that from his view then, and as the company's man-
862 ager, he did not think that the company would adopt or ask a change of rates without taking into consideration that it would cause a great deal of trouble; and from such assurances—not that we counted fully upon that, but from such assurances we felt that the rate would remain at $3.50 per acre.

Q. How long have you been in the business of growing and cultivating citrus trees?

A. In California since 1889.

Q. Had you had any experiences anywhere else?

A. In Florida some.

Q. How often do you find it necessary to irrigate trees on your Chula Vista land per annum?

A. I think that with four times we can get along, I have never irrigated more than that.

Q. What in your judgment as the best horticulture?

A. I think that four times is ample, depending of course upon the rainfall in the fall.

Q. Have you any experience in irrigating anywhere else in this State?

A. Yes, we own some property at Riverside.

Q. Under what water system is that?

A. That is under the Gage system, Gage canal system.

Q. What is the scheme adopted for disposing of water there?

A. Well, when we purchased the land we purchased so many shares of stock, an inch to five acres, perpetual flow.

Q. An inch of water perpetual flow to five acres?

A. Yes sir.

Q. Is that amount of water used upon land there?

A. Yes sir, it is used.

Q. How does the amount of water necessary to be used under the Gage system compare with the amount of water necessary to be used at Chula Vista?

A. Well the water is not measured with us at Chula Vista, so that I cannot tell except from Mr. Savage's figures what
863 amount of water runs out of the taps, but of course we know what comes out of the gates at Riverside, because it is measured.

Q. How many times do you irrigate at Riverside?

A. I believe about seven times on the average.

Q. How many acres are there under irrigation under the Gage canal?

A. I cannot answer that question definitely.

Q. Have you an idea about how many, just roughly speaking?

A. Well because part of the water is furnished to another tract I could not give a definite idea at all—the Howell's Addition tract.

Q. Is there as much as 5000 acres under irrigation?

A. I would think so, yes sir.

Q. Do you also get water from that canal for domestic use?

A. Yes sir.

Q. In what way is it delivered for that use from the canal?

A. Well if the land is situated below where there is any fall—we ourselves live right at the canal and the water runs into filtering cisterns and is taken from there to the house.

Q. What is the source of supply for this Gage system?

A. They own artesian water in the San Bernardino mountains I believe they are—it is at Victoria—and from there it is taken by an open ditch, cemented canal, to the lower end of the valley, and besides the artesian wells they have I think 300 inches about—fully that—of the Santa Ana water.

Q. Do you know how many acres they have of this artesian land as a part of the system?

A. I think it is 2000 acres in that artesian tract.

Q. What is the Spanish name of that kind of land?

A. Cienaga—is that what you mean?

Q. Cienaga—that is water-bearing lands is it?

A. Water-bearing lands.

Q. Do you know anything about the value of water-bearing lands in that neighborhood?

864 A. I could not say what that is worth. I know in Pomona what one piece of artesian water land was sold for some years ago, about seven or eight years ago I presume.

Q. You have no knowledge of any since?

A. None since.

Q. Do you know what valuations are put upon that sort of land at this time?

A. The loop system, the loop tract to which I referred, of 100 acres, was sold at $1000.00 per acre. $100,000.00 was the price paid.

Q. What is the expense of water per annum under the Gage system?

Mr. WORKS: I do not see how that is material, what the expense is there.

Mr. HAINES: Well it has some bearing.

Mr. WORKS: There as I understand it, water-consumers are themselves stockholders of the company, it is not a water selling and distributing company to outsiders at all.

Mr. HAINES: We think we are, too.

Mr. WORKS: Well, you are not, whatever you may think—you do not own any stock in the company, and never did.

Mr. HAINES: The statement is made by this company that this is the cheapest water in southern California.

Mr. WORKS: I have no doubt that is so.

Mr. HAINES: Then we will take this evidence.
Mr. WORKS: I do not know why that should be so, the board does not have to determine what is the cheapest water.

A. The price has been the last year $1.80 per acre.
Q. Does that include both irrigation and domestic use?
A. Yes sir.
Q. And an inch to five acres?
A. An inch to five acres.

865 By Mr. WORKS—Cross-examination:

Q. As I understand you, Mr. Gulick, there the consumers are all stockholders in the company?
A. Yes sir.
Q. The company does not sell water to outsiders at all?
A. I believe they do. They own a certain amount above the amount that goes with that certain tract of land, so that they are now selling water for outside pieces above the land.
Q. Is that their own land do you mean, or to outsiders?
A. Outsiders.
Q. But so far as the company's own land is concerned, it furnishes to the stockholders themselves.
A. To the stockholders themselves.

By Mr. HAINES:

Q. Do you know what the price to this outside land is for water?
A. I just know for two or three pieces above the canal near us that have been sold at $100 an acre.
Q. It is not the land, it is the water?
A. They ask $750 an inch in the canal.
Q. $750 an inch?
A. Yes, $750 an inch.

C. H. STUART, being duly sworn, testifies.

By Mr. HAINES:

Q. What is your name?
A. C. H. Stuart.
Q. Where do you live Captain Stuart?
A. Chula Vista.
Q. Were you a party to any negotiation for the purchase of lands from the San Diego Land and Town Company at Chula Vista?
A. Well we did not buy from the company.
866 Q. You did not buy from the company?
A. No sir.
Q. You bought from whom?
A. From Warren Kimball.
Q. By the way, did the Kimballs, Frank and Warren, have considerable tracts of land on Chula Vista?
A. Well it was so understood at the time, that is in looking for land we were shown a good deal of land by them.
Q. Did you have any conversation with the officers or with any

officer of the San Diego Land and Town Company with respect to water and water rates for the Kimball land, and if so, state what it was?

A. Well at the time we bought or just before we bought we were looking at lands of both the company's and Kimballs'—George Dickinson was showing us lands for the company, it was supposed he was acting as the agent for them at that time, that is the way we understood it anyway, that he was selling lands for the company. He showed us lands, but we finally decided to buy from Kimball on account of lands being cheaper but before we bought and before the company knew we were going to buy we asked Col. Dickinson in the office if there was any difference in the water rates for the land, and we were told by him that there was no difference.

Q. Did he give any reason why there was no difference?

A. That the company had an agreement with the Kimballs that the Kimball lands, that the same conditions should govern the Kimball lands that governed the company in regard to the water supply. That is what we were informed.

Q. After that was the land bought by you from the Kimball tract?

A. Yes sir, after that we bought land from the Kimballs.

Q. When you speak of that you mean yourself and who else?

A. Well my wife owns the land—and my brother-in-law Harry Henderson.

867 Q. How much land was purchased?

A. At that time we bought fifteen acres, that was in May, 1890, early in May, and later in that month, I think it was later than month we bought an additional five acres so that the family would have five acres apiece.

Q. Making twenty acres?

A. Yes.

Q. Was there anything said in this conversation about the annual rate?

A. The annual rate should be $3.50 per acre.

Q. Was anything said about the permanency of the rate?

A. Well if I recollect the conversation just right we were told at that time that the policy of the company was to fix the rate high enough so there would be no danger of raising it, and that at any rate that the company had no right to raise rates, that if there was anything like that which should come up it would naturally come before the supervisors and they would have to fix that to suit themselves, there were the ones that governed water rates outside of the city.

Q. Do you know who made the donation of lands on Chula Vista and in the Sweetwater valley to secure the bringing of the Santa Fe system into San Diego?

Mr. WORKS: We enter our objection to that that it is immaterial. We reserve our right, we do not want to discuss it. We expect these gentlemen to prove everything they want to, but we do not want to admit on the final hearing that it is material for the board to consider. If you have any personal knowledgeon the subject, Captain——

A. I was no party to the transaction and of course cannot have any personal knowledge, not being in the country at the time.

Q. (Repeated by the reporter.)

A. I have been informed——

868 Mr. WORKS: Now if the board please, this is certainly going too far. He says he was not even in the country at the time and has not any personal knowledge upon the subject.

Q. From whom have you any information?

A. From Frank and Warren Kimball.

Q. Have you any information from the company at any time, from any officer of the company?

A. I am not certain enough about that to state.

JOHN E. BOAL, recalled, testifies.

By Mr. HAINES:

Q. Can you state what the taxes on the whole property of the San Diego Land and Town Company were for the year 1888?

A. I depend entirely upon the report before me.

Q. You believe that to be correct do you not?

A. I believe that to be correct. It states the amount to be $20,298.78.

Q. And for the year 1889?

A. The same source.

Q. By this report do you mean the report made by the board of directors to the stockholders of the San Diego Land and Town Company?

A. I do—it was $23,971.52; for the year 1890 from the report, $21,341.26.

Q. For the year 1891?

A. The amount as stated here, $10,783.38, I cannot account for that very great difference, unless it is that the system of paying was changed over.

Q. The proportion for the water system was proportionately less also, $2,511.09 for the same year?

A. It is.

869 Q. And for 1892?

A. For the year 1892, $19,021.82.

Q. In that year the amount shown by your report as being taxed upon the water system is only $2,250.98?

A. That is the amount shown.

Q. Is that more or less than you would think ought to be its proportionate amount?

Mr. WORKS: I understand this is not taxed by proportions Mr. Haines, it is the exact amounts levied against the property.

Mr. HAINES: No I think not, is it Mr. Boal?

WITNESS: It certainly is. There are certain portions that the total tax is figured out against it on the tax receipt; there are other portions in which a section of land may be included with other sections, but the valuation of that land is given, and the tax is deter-

mined by the rate that prevails as to those lands with which it is included.

Q. Then if the proportion between these taxes for different years varies, it is owing to different valuations put upon the water system as compared with other property?

A. That would be the only explanation I could suggest.

Q. What was the tax for the year 1893 upon the whole of the company's property?

A. It was $26,698.07.

Q. For the year 1894?

A. For the year 1894 it was $22,273.47.

Q. Have you any account of the taxes for the whole of the company's property for 1895?

A. I have not.

Q. Or 1896?

A. I have not.

Q. Looking on page 14 and page 16 of the report of the board of directors of the San Diego Land and Town Company to the stockholders, dated December 31, 1894, will you state whether substantially the same items of assets remained the property of the
870 company until June 14th 1897 as shown on those pages?

A. Substantially.

Q. I believe you stated the other day the valuations made upon this property were made under your direction as manager?

A. They were.

Q. And since that time the company has planted some three hundred and thirty odd acres of land—I believe that was developed.

A. I do not recollect the number of acres. Whatever was developed at that time was probably correct. Planting has been done.

Q. And since that time the pipe line No. 2 was built, except that $948.28 had been invested prior to the time of this report in that?

A. Yes sir.

Q. And in the figures inserted for Sweetwater dam at that time there was put in the cost of construction as it stood at that date?

A. I do not see the account, where is it?

Q. Near the bottom of page 14.

A. That item of Sweetwater dam included reservoir lands as well.

Q. And pipe line supposed to be No. 1, not named?

A. That was the amount expended up to that time.

Q. And the expenditure for pipe line No. 2 since was about how much—you gave it the other day Mr. Boal, but I have forgotten—can you give it from this statement here? The approximation will be sufficient.

A. $69,789.38 approximately.

Q. Now as the whole of the property of the San Diego Land and Town Company stood on June 14th, 1897, what would — say as to the comparative valuations of the property with these additions?

A. I have made no estimates of that yet. I certainly do
871 not care to make a statement offhand.

Q. Well at that time was it by you believed to be a valuation made on the same basis throughout, of comparative valuation?

A. At that time—you mean this date, the date of this report?
Q. Yes, December 31, 1894.
A. So far as I was able to determine at that time the valuations were comparative.
Q. Have you any reason to believe that they have materially changed since, not in absolute valuation, but comparatively?
A. It is certainly possible that they have changed since comparatively.
Q. Have you any reason to believe they have?
A. I would like to make this explanation, that generally we have been holding outside lands beyond the reach of irrigation at a value, prospective at least, but a great deal of that land has become encumbered by irrigation districts and otherwise until the present value of them we consider practically nothing, until those districts are disposed of.
Q. How much would that affect this schedule of assets?
A. Practically all of our land outside of Chula Vista has been at times included within the irrigation districts.
Q. You do not mean any of the lands within National City or the city of San Diego, do you?
A. I do not.
Q. Any of the lands in ex-mission?
A. Some of the lands in ex-mission.
Q. How much of them?
A. Most of the lands that we continue to own in that section.
Q. About how much do you continue to own in ex-mission?
A. Something like 350 acres my recollection is.
Q. You still own 350 acres?
A. Something like that—these are off hand answers and an
872 examination of the books might show a difference. I have either to refuse to answer them at all or else give an answer of that nature.
Q. Now what other lands are under irrigation districts besides ex-mission lands?
A. The Otay district included the lands south and east of Chula Vista, the Jamacha district includes the lands north and east of National City and Sweetwater valley; Linda Vista district includes lands north of San Diego practically—there are some few lands along near La Jolla that are not included.
Q. The Otay ranch would be in the Otay irrigation district, would it not?
A. Yes sir.
Q. And that district has voted to disband operations hasn't it?
A. It has.
Q. How much of your National Ranch lands are in any irrigation district?
A. A very large portion of it, I think the Otay district must include something like 8000 acres of the National ranch.
Q. There is no indebtedness to speak of under the Otay irrigation district is there?
A. It is perhaps difficult to say positively. I understand that

there is a body of men who claim to be the directors of the district still holding meetings.

Q. I say there is no indebtedness of that district to speak of is there?

A. Not a very large indebtedness, no bonded debt.

Q. And the San Diego Land and Town Company is engaging with the Southern California Mountain Water Company for putting this land under irrigation is it not?

A. It is.

Q. Without respect to the Otay irrigation district?

A. Yes, we certainly hope for the disposing of or the dissolution of that district, but it is not out of the way, as I under-

873 stand.

Q. Are any of the lands of the company in the National ranch in the Jamacha irrigation district?

A. There are some 3000 acres.

Q. How many acres of land does the company srill own in National ranch approximately?

A. Between 15,000 and 17,000 acres I think.

Q. Have you paid any taxes to the Otay irrigation district?

A. We have not.

Q. Have you paid any taxes to the Jamacha district?

A. We have.

Q. Are you still paying such taxes?

A. We are not.

Q. Is the company recognizing the legality of the Jamacha district?

A. It has not been declared as legal as yet.

Q. That is not the question, is the company recognizing its legality?

A. I might say generally that we look upon the district in this way, that if it is legal the land within the district certainly is not worth the taxes; if they are declared illegal the land is of some value.

Mr. HAINES: That is all.

Mr. WORKS: That is all Mr. Boal.

Mr. HAINES: I see that this report of December 31st, 1894, has been marked Petitioners' Exhibit L. I do not like to lose the copy of the book, and therefore I would ask leave to substitute a copy of what appears upon pages 14 and 16. May I have the leave to do so?

The CHAIRMAN: I have no objection. If there is no objection you may.

Mr. WORKS: I would like to see the copy that is made and see what it does contain.

874 Mr. HAINES: Yes, that is proper.

Mr. WORKS: You can go on with anything else.

Mr. HAINES: I want to offer the articles of incorporation of the San Diego Land and Town Company of Kansas, not for the purpose of making them an exhibit, but they may be considered in evidence by consent, for the purpose of reference to them.

Mr. WORKS: All right—get everything in here you can.

Mr. HAINES: I should like also to offer the certified copy of articles of incorporation of the San Diego Land and Town Company of Maine, when they are found, they seem to have been mislaid.

Mr. WORKS: I do not know where you can find them, we have been hunting for them and the clerk has been hunting for them, they seem to have been mislaid by the clerk after they were filed.

JOHN E. BOAL, recalled.

By Mr. HAINES:

Q. Mr. Boal, do you know when those articles of incorporation or a certified copy of the articles of incorporation of the San Diego Land and Town Company of Maine were filed in the office of the clerk of this county?

A. I do not know the date.

Q. Do you know about when?

A. I should judge they were filed six or eight weeks ago, it might have been a shorter or longer time.

Q. When did the San Diego Land and Town Company of Maine commence doing business in this State?

A. The transfer of the property was made on the last day of July.

Q. Of 1897?

A. 1897.

875 Q. And they commenced business——

A. On the following day.

Q. Had they any officers representing the corporation within this State prior to that time, engaged in the management of any business for it?

A. Not unless the reorganization committee of the old company, who were also officers of the new company, might have had some business in charge.

Mr. TRIPPET: The company was not organized until the reorganization committee left the State was it?

A. I am not sure as to that.

Q. I am confining the question entirely to the corporation as a corporation, not to any preliminary committees, but as a corporation was it represented by any officers for any length of time prior to the 1st of August, 1897?

A. Not that I know of.

Q. You are the resident manager of that company?

A. I am.

Q. And you assumed your duties as such about the 31st of July or the 1st of August, 1897?

A. About the first of August.

Mr. HAINES: That is all I guess. I wish to use your reports again Mr. Boal. I wish to offer in evidence the report made by the board of directors of the San Diego Land and Town Company to the stockholders commencing with that of December 31, 1888, with respect to the San Diego Land and Town Company water department.

Mr. WORKS: I suppose it is understood by the board and by counsel that we are objecting to all of this as being immaterial?

Mr. HAINES: Yes sir. I offer from page 25 of the report of the year last mentioned.

San Diego Land and Town Company, water department, Dr.

By rent account		$3,991.31
	CR.	
	Maintenance of pipe line	1,069.72
876	Maintenance of Sweetwater dam	812.03
	Service	379.72
Expenses		1,156.07
	Total	$3,417.54
Balance to credit December 31, 1888		573.77

For the year ending December 31, 1889, the following:

San Diego Land & Town Company, water department, Cr.

By balance Dec. 31, 1888	$573.77
By rent account	11,054.86
By service	280.25
Total	$11,908.88
CONTRA.	
Maintenance of pipe line	$4,708.49
Maintenance Sweetwater dam	2,519.58
Expense	1,762.67
Total	$8,990.74
Balance to credit December 31, 1889	2,918.14

From the report of like character made December 31, 1890, the following:

San Diego Land & Town Company, water department, Cr.

By balance Dec. 31, 1889	$2,918.14
By rent account	12,679.05
Total	$15,597.19
CONTRA.	
Service	$116.32
Maintenance pipe line	4,651.30
Maintenance Sweetwater dam	1,557.43
Expense	1,690.43
Total	$8,015.48
Balance to credit December 31, 1890	7,581.71

From the report of like character of date December 31, 1891, the following:

877 San Diego Land and Town Company, water department, Cr.

By balance Dec. 31, 1890	$7,581.71
By rent account	17,451.73
Total	$25,033.44

CONTRA.

Service	$232.32
Maintenance pipe line	5,150.29
Maintenance Sweetwater dam	4,226.83
Expense	3,393.02
Total	$13,002.46
Balance to credit, Dec. 31, 1891	12,030.98

From report of like character of date December 31, 1892, the following:

San Diego Land and Town Company, water department, Cr.

By balance Dec. 31, 1891	$12,030.98
By rent account	18,907.10
Total	$30,938.08

CONTRA.

Service	$677.78
Expense	2,628.61
Maintenance pipe line	6,409.38
Maintenance Sweetwater dam	1,643.40
Total	$11,359.17
Balance to credit Dec. 31, 1892	19,578.91
Income for year 1892	18,907.10
Expenses	11,359.17
Net income 1892	$7,547.93
Net income for 1891	4,449.27
Increase in 1892 (70 %)	$3,098.66

From report of like character for year ending December 31, 1893, the following:

878 San Diego Land and Town Company, water department, Cr.

By balance Dec. 31, 1892	$19,578.91
By rent account 1893	22,255.86
By service account, 1893	2,315.20
Total	$44,149.97

CONTRA.

Expense	$2,913.91
Maintenance pipe line	6,609.19
Maintenance Sweetwater dam	1,887.38
Total	$11,410.48
Balance net credit December 31, 1893	$32,739.49
Income for year 1893	24,571.06
Expense for year 1893	11,410.48
Net income for year 1893	13,160.58
Net income for year 1892	7,547.93
Increase for 1893 over 1892 (74%)	5,612.65

From like report of date December 31, 1894:

San Diego Land and Town Company, water dep't, Cr.

By balance Dec. 31, 1893	$32,739.49
By rent account	24,564.67
By service account	245.30
Total	$57,549.46

CONTRA.

Expense	$2,656.02
Maintenance pipe line	3,505.03
Maintenance Sweetwater dam	1,689.13
Total	$7,850.18
Balance to credit December 31, 1894	$49,699.28
Income for 1894	24,809.97
Expense for year 1894	7,850.18
Net income for year 1894	16,959.79

We are advised that at this date the reports of this character made by the board of the company ceased.

879 We now offer in evidence, not for the purpose of filing as exhibits, the receiver's deed of real property from Chas. D. Lanning as receiver of the San Diego Land and Town Company of Kansas to the San Diego Land and Town Company of Maine, recorded August 2nd, 1897, in Book No. 263 of Deeds, at page 343 *et seq.*

Also the receiver's bill of sale of personal property made by

Charles D. Lanning as receiver of the San Diego Land and Town Company of Kansas to the San Diego Land and Town Company of Maine, recorded August 2nd, 1897, in the recorder's office of San Diego county in Book No. 3 of Bills of Sale at page 345 *et seq.*

Mr. WORKS: We make the same objection to these that we made to the others, to preserve our rights.

JOHN E. BOAL, recalled.

By Mr. HAINES:

Q. Mr. Boal, was there any other conveyance of real property than this in evidence that you know of, made from the receiver of the San Diego Land and Town Company of Kansas to the San Diego Land and Town Company of Maine?

A. Not that I know of.

Mr. TRIPPET: We offer in evidence the statement of C. D. Lanning, receiver of the San Diego Land and Town Company for the year 1897, for taxes, San Diego county, and the valuations placed on the property.

Mr. WORKS: This all goes in under our objection that we made yesterday.

Mr. TRIPPET: I suppose the reading of these will be waived and that they will be considered in evidence without being read?

Mr. WORKS: Oh, yes. I would hate to have the board inflicted with that.

880 Mr. TRIPPET: The dam is assessed at $75,000 and the distributing system at $80,000. The real estate other than the city and town lots and improvements on same is assessed at $282,346; improvements on same $92,120; city and town lots, $185,215; improvements on same, $8,315.

Now we offer in evidence the statement of the San Diego Land and Town Company for the year 1896, subscribed and sworn to by John E. Boal, receiver's agent. The assessment of the dam and the distributing system is the same as in 1897. The real estate is valued at $357,355; improvements $85,200; city and town lots $163,264; improvements on same $7,000.

We offer in evidence the statement of the San Diego Land and Town Company for 1895. The assessment of the distributing system for that year is $12,000 less I believe. The real estate is valued at $354,385; city and town lots $300,509; improvements on the same $8,280; total valuation of real estate and improvements $663,074.

We offer in evidence the statement of the San Diego Land and Town Company for the year 1894. The whole property is assessed that year at $714,134.

We offer in evidence the statement of the San Diego Land and Town Company for the year 1893. The assessment that year is $764,014.

We offer in evidence statement of the San Diego Land and Town Company for the year 1892, signed by John E. Boal, general manager. The summary is torn off from this statement, the footings.

We offer in evidence statement of the San Diego Land and Town

Company*n* for the year 1891. The total footing does not seem to be made in this either.

We offer in evidence statement of the San Diego Land and Town Company for the year 1890. There does not appear to be a summary statement in this one either containing all the property.

We offer in evidence the statement of the San Diego Land
881 and Town Company for the year 1889 and the year 1888. I will say*m* that the water system is assessed the same except in 1895 it was increased $12,000 as far as my information extends from an examination of them.

Mr. WORKS: Well gentlemen, have you anything else?

Mr. SHAW: I think that about completes our testimony. There are two or three witnesses that we want to put on. They may not be here however until afternoon, and that completes the testimony. Mr. Chairman were there not some questions that you wanted to ask Mr. Savage?

The CHAIRMAN: Yes, one or two.

Mr. WORKS: They had better go into the reporter's record I suppose.

H. N. SAVAGE, recalled, testifies.

The CHAIRMAN: I asked Mr. Savage a question, and he has his answer all figured out.

By the CHAIRMAN:

Q. You have your statement have you?

A. I do not think I have it with me. There is the one I gave you.

Q. What quantity of water did the reservoir contain on the following dates, January 1st, 1893, January 1st, 1894; January 1st, 1895; January 1st, 1896; January 1st, 1897, and how much water is in the reservoir at the present time? Then what per cent. of the run-off of the water-shed has been impounded during all those years? Those were the questions I asked him, and he has it all figured out there.

A. January 1st, 1892, there was stored in the Sweetwater reservoir 2.8 billion gallons. Of the total yield of the drainage basin
100 per cent. or all was stored and held in the reservoir. Jan-
882 uary 1st, 1893 there was stored in the reservoir 2.8 billion gallons, and 57 per cent. of the total yield of the drainage basin was saved.

January 1st, 1894, there was 3.6 billion gallons stored, and 100 per cent., or all of the yield of the drainage basin was saved and stored

January 1st, 1895, there was 1.7 billion gallons in the reservoir, and of the flood 18 per cent. was saved and stored.

January 1st, 1896, there was 3.1 billion gallons in the reservoir, and 100 per cent. of the total yield of the drainage basin was saved and impounded.

January 1st, 1897, there was 1.077 billion gallons in the reservoir

and 100 per cent. of the yield of the drainage basin was saved and impounded.

October 10th, 1897, there was 1.156 billion gallons stored in the reservoir.

The CHAIRMAN: That was all I wanted to ask.

Mr. WORKS: That is all.

By Mr. SHAW:

Q. Do your answers give the quantities of water impounded in the reservoir on the 1st of January of each of those years, or the amount impounded during the year?

A. It gives the amount that was in the reservoir the first of January of each year.

Q. Then if you took an estimate on the first day of April say following each of those dates, it would show a much greater quantity of water in the reservoir, would it not? That is it would show the quantities of water in the reservoir on those different dates, the first of January of each of those years plus the quantity of water or catchment from that time to April 1st?

A. It would.

Q. This does not show the quantity of water which you have available for irrigation then at the beginning of the irrigation season?

A. It does not.

883 Q. The quantity would be a much greater one would it not?

A. It would be a greater one depending on the catchment of course.

Q. Between January 1st and the beginning of the irrigation season?

A. Yes sir.

Q. Have you any data with you which shows the quantity of water impounded in the reservoir on the first day of May of each of those years?

A. I have, yes sir, but if you will allow me to suggest, I have compiled the quantity of water in the reservoir which was the greatest quantity available at the beginning of the various irrigation seasons—it might not be May—is not that what you want?

Q. No, I would rather have it upon a given date, but never mind that just now.

A. I will get it on the dates as you ask—what was the date?

Q. The first of May of each year, beginning with 1892.

The CHAIRMAN: Let me make a little explanation of this, of what I was trying to get at. I wanted to ascertain exactly—I considered January was the close of the irrigation season, and I wanted to ascertain for my own knowledge how much water there was in the reservoir at the close of the season.

Mr. SHAW: I see—now if we can get at the beginning I think that would enlighten the board.

(The witness is to produce these figures after the noon adjournment.)

Q. Mr. Savage, what is the flow approximately of the Sweetwater river in the month- of May, June and July, measured in inches if you can, and I mean above and flowing into the reservoir?

A. The Sweetwater river on an average has a very little water flowing in it directly above the reservoir where there is an
884 outcropping of bed rock which would undoubtedly show water if there were any in the stream much before the first of January year by year, and the flow almost invariably ceases before the first of July. These dates vary a little, but that is approximately very correct, and the flow of the river by the year extends longer or shorter of course with the quantity of the rainfall, and in June the average year there is almost no *no* flowing, so much so that I had a gauge or a weir placed up there in 1891 after a very big year's catchment, and the last of that there would be a *l*ittle flowing in the morning and none at night, due to what little there was having evaporated from the stream above.

Q. How is it average years in May?

A. In average years in May there is of course slightly more than in June, but very small in total of inches; I am unable to estimate that quantity.

Q. Do you think there would be as much as 100 inches?

A. In May on an average?

Q. Yes.

A. No sir I do not think there would be nearly as much as that. That quantity is taken into consideration in the run-off. These run-offs are computed by me at the end of the catchment period, and that is estimated as nearly as it may be, and included in that total yield.

Q. Now when you speak here of the per cent. of run-off being impounded in the dam or reservoir these various years as for instance in 1892 100 per cent. of the run-off was impounded you said; in 1893 only 57 per cent. was impounded, and in 1895 only 18 per cent. run-off was impounded—why was that?

A. Why was all of it impounded?

Q. Why does that per cent. vary, from all of the run-off one year to only 18 per cent. of the run-off another year?

A. Because of the run-off being so great in quantity that it is impossible to impound it in that reservoir, is one factor, and
885 the other quantity of water in the reservoir being such that the balance of the storage does not require only the given per cent.

Q. Do you mean in the year 1895 it only required 18 per cent. of the run-off to fill the reservoir?

A. Eighteen per cent. of that year's total drainage basin yield to fill the balance of the reservoir that was not already filled at that time.

Q. So that January 1st, 1895, when you had 1.7 billion gallons

of water in the reservoir, 18 per cent. of the run-off filled the reservoir to overflowing?

A. Yes sir.

Q. And on January 1st, 1892, when you had 2.8 billion gallons of water in the reservoir, you impounded the entire run-off that year?

A. Yes sir, that is right.

Mr. SHAW: That is all I believe.

By Mr. WORKS:

Q. I understand, Mr. Savage, that with respect to the amount of water that flows in the Sweetwater river at the dates mentioned, you have included all that flow in the amount that is realized from the catchment basin?

A. Yes sir, to the best of my ability in estimating and computing.

Mr. SHAW: Judge Haines, have you any further witnesses?

Mr. HAINES: Whatever there will be will be here early this afternoon and we can dispose of them. Have you any further testimony Judge Works?

Mr. WORKS: I will want to put Mr. Boal on.

JOHN E. BOAL, recalled, testifies.

By Mr. WORKS:

Q. You heard the testimony of Mr. Copeland about the
886 making up of those tax assessments did you?

A. I did.

Q. Did you have anything to do with fixing the valuation of the property in those assessments?

A. Not on the real property.

Q. Did you for any of the property, in fixing the amounts?

A. In the personal property he generally asks me what the different things are worth. I tell him the cost and he assesses it in accordance with his general practice of valuing that class of property.

Q. With respect to the pipe lines and reservoir of the Sweetwater system, what had you to do with fixing the valuation upon that?

A. Nothing.

Q. Were those amounts filled in at the time you signed the statement or afterwards?

A. I do not recollect that they were filled in, and I should judge from the statement that they were not until after I had signed it.

Q. What did you do with reference to the statement, did you furnish a list of property, or what?

A. I furnished a list of all property that we had, for taxation purposes.

By Mr. HAINES:

Q. Has your company found occasion to appear before the board

of equalization to contest the valuations of your property or the properties of the company?

A. I do not recall of my having appeared before the board.

Mr. HAINES: That is all.

Mr. WORKS: I can say that as far as the representations of Col. Dickinson are concerned, we do not intend to offer any proof upon the subject.

Mr. HAINES: Upon that statement we will produce no more
887 proof upon that subject.

Mr. SHAW: I think we are about through with the testimony.

Mr. WORKS: Your proceedings that you have introduced in evidence refer to a plan of reorganization, and I want to offer that plan of reorganization, in connection with your proof. It is not made a part of the proceedings, but we have a copy of it and I will have that here when the train comes in—otherwise, I think we are through.

The board adjourns until two o'clock this afternoon.

Afternoon session.

H. N. SAVAGE, recalled.

By Mr. SHAW:

Q. Mr. Savage, can you give me the quantity of water in the reservoir on April 1st, for the years 1892, 1893, 1894, 1895, 1896 and 1897 as called for before the noon recess was taken, beginning with April 1st, 1892.

A. April 1st, 1892, 3,800,000 *million* gallons approximately.

Q. 3.8 billion gallons?

A. Yes sir, approximately; April 1st, 1893, 5.6 billion gallons; April 1st, 1894, 3.9 billion gallons; April 1st, 1895, 5.6 billion gallons, April 1st, 1896, 3.3 billion gallons; April 1st, 1897, 3.1 billion gallons.

Q. Then on January 1st, 1896 there was 3.1 billion gallons of water in the reservoir, and on April 1st following there was only 3.3 billion gallons, the catchment for that period of time from January 1st to April 1st showing only 200,000 gallons, is that correct?

A. Making two-tenths; there was some use and evaporation taken into consideration.

Q. Well, any more than the customary use and evaporation?

A. Not during that time.

Q. For that time I mean. What was the rainfall in 1896
888 if you know, from January 1st to April 1st, at the reservoir?

A. About 4 inches.

Q. About 4 inches at the reservoir?

A. Yes sir.

Q. And that yielded you only two-tenths billion gallons of water in the reservoir?

A. Yes sir, two-tenths billion gallons net; you understand that

those tenths are pretty big ones, in order to have these figures check. You understand that those figures are pretty big ones, when you are talking about billion gallons?

Mr. SHAW: I believe that is all Mr. Savage.
Mr. WORKS: That is all Mr. Savage.

PAYNE BROWN, being duly sworn, testifies.

By Mr. HAINES:

Q. You live on Chula Vista do you Mr. Brown?
A. Yes sir.
Q. You have ten acres of land there?
A. Yes sir.
Q. Now near Mr. Price are you?
A. Just across the street.
Q. Are the qualities of your land just about the same?
A. Yes, I should think they were as near the same as two pieces of land could be.
Q. Do you remember a meter having been put on Mr. Price's land by Mr. Savage of the San Diego Land and Town Company?
A. Yes sir.
Q. Do you remember when it was?
A. No, I do not know just when it was put on. I did not know that it was put there until some time after it had been on
889 I was told about it. Then I was talking with Mr. Savage about it a little later on.
Q. What conversation did you have with Mr. Savage about it?
A. I asked him how it happened that he put a meter on there and he said he did it just to see what he was using; he said he thought he was a very moderate irrigator, and he wanted to see about what the average would be.
Q. What did you say to Mr. Savage?
A. I told him if he called him an average, I would like to know what the majority of them would use, that he watered twice to my once all the time and sometimes oftener.
Q. How often do you irrigate?
A. I have watered a portion of my trees three times this season, the majority of them only twice.
Q. Have you given them all they needed?
A. I think I have.
Q. Well do you think Mr. Price used twice as much water as you considered necessary?
A. I honestly believe that he has used as much on his five acres as I have on my ten.
Q. How has it been at times prior to when this meter was fixed, what did Mr. Price raise on his tract of land?
A. Outside of his trees there were two years that he raised melons, that is all I believe. I do not think he ever had any vegetables of any kind on his place.
Q. He has alfalfa on the outside has he, of his tract?
A. No sir, no grass at all.

Mr. HAINES: That is all.

By Mr. SHAW:

Q. What is the difference in the age of your trees and Mr. Price's?
A. Just about the same age. I have a few trees a little older and then I have some the same age as his, and then I have some that are a great deal younger, I have some that have only been
890 out two years.

Q. What is the appearance of your trees, as compared with Mr. Price's trees?

A. I have just as good a growth as Mr. Price has.

By Mr. HAINES:

Q. Are not some of your trees very large?
A. Yes sir.
Q. How many of them?
A. I only have two that I call large trees, they are the largest I think on the tract anywhere. Then I have I guess in the neighborhood of two or three hundred trees there, about three hundred, mostly orange trees, that are as large as Mr. Price's. Then I have quite a number of small trees.

Mr. HAINES: That is all with this witness.

Mr. Boal has furnished me with the total taxes for 1895, 1896 and 1897 as follows:

Paid by the land and town company on all of its property, for the year 1895	$19,352.44
For the year 1896	17,321.06
For the year 1897, to Aug. 1 1897	6,004.97

This corresponds to the time for the taxes on the water system; that is the first installment I take it, as given in the Schedule One.

As far as I am advised that is all of the evidence.

Mr. WORKS: If the board please, before commencing what little I have to say in the opening, I want to submit the following request to the board.

(Mr. Works reads the following request.)

In the Matter of the Petition of M. T. Hall *et al.* for the Fixing of Rates to be Charged for Water Furnished by the San Diego Land and Town Company.

To the honorable board of supervisors of the county of San Diego, State of California:

891 The San Diego Land and Town Company respectfully requests: That in the fixing and determination of the rates to be charged by this company for water to be furnished to its consumers, the board find and determine the following matters, to wit:

1. The value of the dam, reservoir, water rights and distributing system, and all other property actually needed by said company, and useful to the appropriation and furnishing of such water.

2. The annual reasonable expenses of the company, including the cost of repairs, management and operating its works.

3. The cost of any extensions, enlargements or other permanent improvement of the water works of the company, since the original construction of its plant.

4. The amount of depreciation of the plant of the company, by natural wear from use and the action of the elements, either by way of percentage per annum of such deterioration, or the gross sum thereof for the years since the company commenced to furnish water.

5. The rates for irrigation necessary to be charged together with the domestic rates, in order to return to the company net annual receipts and profits of not less than six per cent. upon the value of its property as found by the board.

WORKS, WORKS & INGLE,
Attorneys for San Diego Land and Town Company.

I have drawn this request based upon what I think the statute calls upon the board to determine, with the exception of number four, which applies to the depreciation. That I do not think the statute expressly requires the board to determine, but I think it is one of the important considerations here that the board should take into account, that will return to us the rate required by the statute, and therefore I have requested the board to make its finding
892 upon that question. I concede that it is not obliged to do so by the terms of the statute.

After argument by V. E. Shaw, Esq., the board adjourns until 9 o'clock tomorrow morning.

FRIDAY, *October 15th*, 1897—9 o'clock a. m.

Argument by Oscar A. Trippet, Esq., C. H. Rippey, Esq., and A. Haines, Esq.

Pending the further argument by Mr. Haines the board adjourns until two o'clock this afternoon.

Afternoon session.

Mr. Haines concludes his argument.

Argument by John D. Works, Esq.

The CHAIRMAN: Well, gentlemen, (of the board) you have the matter in your hands now, what is your pleasure?

A SUPERVISOR: I move that this matter be taken under advisement. (Seconded and carried.)

893 I, W. W. Whitson, the shorthand reporter appointed and directed by the board of supervisors to report and transcribe the testimony in the matter of fixing water rates of the San Diego Land and Town Company of Maine by the said board of supervisors of the county of San Diego, State of California, do hereby certify that the foregoing transcript of 512 pages contains a full, true and correct statement of the testimony given and proceedings had in

said matter, and the whole thereof, up to the time the same was submitted for the consideration of the said board.

W. W. WHITSON,
Shorthand Reporter.

San Diego, Cal. October 29th, 1897.

(Endorsed:) No. 768. Filed Sep. 29 1899 Wm. M. Van Dyke clerk.

894 *Maintenance of Sweetwater Dam, Pipe Lines, and Water Department Expense.*

Year.	Expenses.			
	General.	Legal.	Office.	Water dep't.
Year ending 1888.....	1895 24	1000	1500	1156 07
" 1889.....	7122 78	2500	1500	1762 67
" 1890.....	6300 53	2500	1500	1690 43
" 1891.....	9377 12	2500	1500	3393 02
" 1892.....	8052 78	2500	1500	2628 61
" 1893.....	8496 57	2500	1500	2913 91
" 1894.....	5224 83	2500	1500	2645 06
" 1895.....	29147 62	1200	1500	3386 54
" 1896.....	5000 71	1200	2000	3303 02
To August 1st 1897 ...	2540 74	991 62	1166 66	2426 90
Estimate to 12/31/97..	1162 40	500	833 33	1000
	84330 32	19891 62	15999 99	26306 23

Expenses.			Depreciation.				
Taxes.	Interest.	Insurance.	S. W. dam and reservoir.	Pipe line # 1.	Pipe line # 2.	Total.	Water rents.
3441 67	9625	24 50	.....	.....	.....	18642 48	3991 31
5456 72	10500	24 50	.....	.....	.....	28866 67	11054 86
4303 19	10500	24 50	.....	.....	.....	26818 65	12679 05
2511 09	10500	24 50	.....	.....	.....	29805 73	17451 73
2250 98	10500	24 50	.....	.....	.....	27456 87	18907 10
3494 63	10500	24 50	.....	.....	.....	29429 61	22255 86
2810 16	10500	24 50	.....	.....	.....	25204 55	24564 67
3046 34	21000	7 50	.....	.....	.....	59288	23839 03
3444 20	21000	7 50	5874 21	33337 96	4244 26	79411 86	29502 16
1635 33	12250	4 50	4625 32	19453 91	2475 27	47579 25	13196 18
1635 33	.....	3 50	3304 50	13895 65	1768 05	24102 76	9425 85
34029 64	126875	194 50	13804 03	66687 52	8487 58	396606 42	186867 80

Cost of Water System August 1st, 1897.

Sweetwater dam		237,165 05
" reservoir lands		159,290 76
Pipe line Nat'l City	183753 90	
" " outside " "	442797 63	
		626,551 53
Equipment		3,015 45
		1,026,022 79

895 (Endorsed:) Tabulated statement of the Sweetwater dam pipe lines and water department expense. Received and filed this 8th day of Oct. 1897. Will H. Holcomb, clerk of the board of supervisors, San Diego county, by J. M. Dodge, deputy. S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit No. 1. Geo. J. Leovy, special examiner. Land and Town Exhibit No. 1.

896 *Water Rents Received from System from Consumers in National City and Outside of National City.*

	Total receipt.	National City.	Outside Nat'l City.
1888	3991 31		
1889	11054 86		
1890	12679 05		
1891	17451 73		
1892	18907 10		
1893	22255 86	11037 66	11218 20
1894	24564 67	10715 29	13849 38
1895	23839 03	9342 04	14496 99
1896	29502 16	13162 03	16340 13
To Aug. 1st, 1897	13196 18	6442 77	6753 41
	177441 95	50699 79	62658 11
Estimated to 12/31/97	9425 85		
	186867 80		

(Endorsed:) (2) Water rents received Land and Town Co.'s Exhibit No. 2. Received and filed this 9 day of Oct. 1897. Will H. Holcomb clerk of the board of supervisors, San Diego county by J. M. Dodge deputy. S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit No. 2 Geo. J. Leovy special examiner.

897 *Maintenance of Sweetwater Dam, Pipe Lines, & Water Department Expense.*

	Expenses.						
	General.	Legal.	Office.	Water dep't.	Taxes.	Interest.	Insurance.
Year ending 1888.	1895 24	1000 00	1500 00	1156 07	3441 67	9625 00	24 50
" 1889.	7122 78	2500 00	1500 00	1762 67	5456 72	10500 00	24 50
" 1890.	6300 53	2500 00	1500 00	1690 43	4303 19	10500 00	24 50
" 1891.	9377 12	2500 00	1500 00	3393 02	2511 09	10500 00	24 50
" 1892.	8052 78	2500 00	1500 00	2628 61	2250 98	10500 00	24 50
" 1893.	8496 57	2500 00	1500 00	2913 91	3494 63	10500 00	24 50
" 1894.	5224 83	2500 00	1500 00	2645 06	2810 16	10500 00	24 50
" 1895.	29147 62	1200 00	1500 00	3386 54	3046 34	21000 00	7 50
" 1896.	5000 71	1200 00	2000 00	3303 02	3444 20	21000 00	7 50
" 1897.	5694 68	1200 00	2000 00	4199 45	3954 32	.....	7 50
	86312 86	19600 00	16000 00	27078 78	34713 30	114625 00	194 00

Depreciation.				Water rights refunded.	Total.	Water rents.
S. W. dam.	Pipe line #1.	Pipe line #2.	Meters.			
.....	.....	.....	.....	.....	18642 48	3991 31
.....	.....	.....	.....	.....	28866 67	11054 86
.....	.....	.....	.....	.....	26818 65	12679 05
.....	.....	.....	.....	.....	29805 73	17451 73
.....	.....	.....	.....	.....	27456 87	18907 10
.....	.....	.....	.....	.....	29429 61	22255 86
.....	.....	.....	.....	.....	25204 55	24564 67
.....	.....	.....	.....	.....	59288	23839 03
5874 21	33337 96	4244 26	.....	.....	79411 86	29502 16
7929 12	33349 59	4243 49	242 05	1772 06	64592 26	27145 18
13803 33	66687 55	8487 75	242 05	1772 06	389516 68	191390 95

Cost of Water System Dec. 31, 1897.

Sweetwater dam		237165 05
" reservoir lands		159290 76
Pipe line National City	183753 90	
" " outside " "	442797 63	
		626551 53
Equipment		3015 45
		1026022 79

Equipment, 1896.

Meters	2355 52
Live stock	400
Tool a/c	259 93
	3015 45

(Endorsed:) 3 S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit No. 3 Geo. J. Leovy, special examiner.

898 *Water Rents Received from Consumers — National City & Outside National City.*

Year.	National City.	Outside Nat. City.	Totals.
1888			3991 31
1889			11054 86
1890			12679 05
1891			17451 73
1892			18907 10
1893	11037 66	11218 20	22255 86
1894	10715 29	13849 38	24564 67
1895	9342 04	14496 99	23839 03
1896	13162 03	16340 13	29502 16
1897	11412 41	15732 77	27145 18
	55669 43	71637 47	191390 95

(Endorsed:) Ex. 4. S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit No. 4. Geo. J. Leovy, special ex'r.

899 San Diego Land and Town Company.

Reorganization Plan and Agreement.

900 San Diego Land and Town Company.

Reorganization.

BOSTON, MASS., *December* 9, 1895.

To the stockholders:

The affairs of the company having been placed in the hands of a receiver on September 4, 1895, which action was taken at the instance of stockholders to protect the property of the company and their ownership therein against the demands of creditors, it became necessary that further steps should be taken to formulate and carry into effect plans which, by taking care of the claims of creditors, should preserve the interests of stockholders; and accordingly, on September 28, 1895, at a meeting of holders of large amounts of the company's stock, the undersigned (Messrs. B. P. Cheney, Charles W. Shattuck, Walter L. Frost, and Edward H. Mason) were appointed and constituted a reorganization committee to have charge of the reorganization of the company on behalf of its stockholders, which duty has also been undertaken in accordance with the desires of the board of directors, the undersigned being members thereof.

As leading up to the statement of the plan we approve, we would say that the company, organized in 1881, has since 1887, done a comparatively small business in the sale of land. In the latter year sales amounted to about $1,500,000, in 1888 to $136,000, and for the past six years have averaged only about $40,000 for 1894 being $18,000. The company now owns about 33,000 acres of the 38,000 it had originally,—there being now about 30,500 acres of irrigated and unirrigated land (comprising in that amount the company's orchards), 3,300 lots in National City, and 1,000 lots in San
901 Diego which was inventoried December 31, 1894, at $2,700,000.

The company since 1887 has expended about $2,000,000 in the improvement of its property, by the construction of the water system, railway, and various buildings, and by the planting of its orchards. This amount has been derived as follows:—

Increase of capital stock	$750,000
Earnings, about	550,000
Sales of, and loans on, bonds	621,000
	$1,921,000

In addition to the earnings thus expended, dividends to the amount of $645,000 were paid during 1887–'88. Work of repair and construction to the value of $44,000 had, on September 4, 1895, been completed and not paid for.

Since 1890 a policy of planting and developing the company's irrigated lands has been steadily pursued, and the company now has, besides nurseries, 1,264½ acres of orchard as follows:

Oranges.

Planted 1890	86 acres	
" 1891	44½ "	
" 1893	16 "	
		146½ acres

Lemons.

Planted 1890	50 acres	
" 1891	88 "	
" 1892	135 "	
" 1893	346 "	
" 1894	86 "	
" 1895, about	290 "	
		995 "

Grape Fruit.

Planted 1893	5 acres	
" 1895 about	110 "	
		115 "

902 *Walnuts.*

Planted 1891	8 acres	
		8 acres
Total		1,264½ acres

We find the assets of the company on September 4, 1895, were as follows, the amounts being ledger amounts, given in round numbers:

Company's lands	$1,186,000
Water system	958,000
National City and Otay railway bonds at par	451,000
150 shares Sweetwater Fruit Co. stock	15,000
Horticultural department	190,000
Horticultural department, live stock	2,500
Buildings: Hotel, office building, cottages, packing-house, stables, corral, storehouses, etc	45,700
Tools, live stock, material on hand, etc	9,100
Land contracts	175,000
Notes receivable and accounts collectable	4,900
Cash	5,500
	$3,042,700

"Horticultural department" includes simply the cost of planting and developing the orchards, the value of the land being carried in "company's lands."

The liabilities of the company were, on the same date, as follows:

Seven per cent. debenture bonds of 1900		$500,000
Six per cent. mortgage bonds of 1905		500
Notes payable		158,500
Interest: Coupons	$12,370	
Notes to October 22d	5,600	
		17,970
903 Due for material, construction work, etc.		34,000
Due for wages, etc.		10,000
Construction contracts to be performed		5,000
		$725,970

Upon the present organization of the company's affairs, its yearly operating expenses and income are as follows, combining the railway as a department of the land company:

Operating Expenses.

Interest on debt	$45,000
Taxes	22,000
General expense	12,000
Improvements and insurance, etc	2,500
Water department	8,000
Horticultural department	30,000
Railway	30,000
	$149,500

Income.

Land sale collections and interest	$15,000
Water department	25,000
Railway	32,000
Horticultural department	8,000
	$80,000

Since the change in the administration of the company, in May, 1894, the following amount of money has been raised for its purposes:

From sale of $173,000 seven per cent. bonds at 92½	$160,025.00
From sale of, and loans on, six per cent. bonds	158,962.50
	$318,987.50

904 which has been expended as follows:—

Payment, floating debt outstanding May, 1894	$122,000
Payment on account construction new pipe line	60,000
Repair damages to dam, pipe line and railway caused by flood of January, 1895	22,000
Replanting 86 acres orchard, 1894	25,000
Planting 400 acres orchard, 1895	
Bond interest, August, 1894, February and August, 1895.	36,500
Operating deficit apart from bond interest	53,000
	$318,500

The orchards are now well advanced and, irrespective of land sales, the income from sales of fruit should soon be sufficient to more than take care of the operating expenses,—a result we expect to see reached in 1897 or 1898. Estimates of the yield of the orchards for the season (ending September 1st) of 1895–'96 show we may expect from 4,000 to 5,000 boxes of oranges as compared with 1,300 in 1894–'95; and also a like increase in the lemon crop which for 1894–'95 was about 1,100 boxes. Not much can be done to revive land sales; they must await a renewal of general prosperity; but the company is in position, of course, to reap the full benefit of such activity as may come. With the expected heavy increase of travel to southern California this winter, and the general hopeful outlook for that section consequent upon the assured market for its fruit products, a more active condition of the real-estate market there would seem to be in sight. The water department, it is believed, will soon make a better showing as a result of a complete overhauling of the basis of its administration; and both the railway and the water department will soon show the material increase of earnings consequent upon increased development.

905 From the above statement, it would seem, therefore, that if the interest charges of the company can be done away with, the expected increase of income from fruit sales, which should be brought by the approaching maturity of a large part of the com-

pany's orchards, together with increase of earnings in the railway and water departments, should leave a net income from the company's operations applicable to dividends. To carry the company till those earnings are adequate for its purposes, further capital is required. Meanwhile the heaviest burden on the company is its interest charge. It has therefore seemed to us that a plan of reorganization to be effective must provide sufficient funds to pay off the company's debt, and also must provide further working capital to a reasonable amount. The following plan seems adequate to accomplish those objects:—

Plan.

Assess 90,000 shares at $10	$900,000
Pay debt and expenses	800,000
Leaving a working capital	$100,000

Preferred stock to be given for the assessment, making securities of new company—

36,000 shares preferred stock at $25	$900,000
90,000 shares common stock at $25	2,250,000
	$3,150,000

Preferred stock to be preferred both as to dividends and assets; to be callable by company at par plus interest at six per cent. from time of issuance less any dividends paid thereon, but otherwise to be non-cumulative. Preferred stock may also be made receivable at a given price as payment for land sales.

Hence the holder of each share of stock in the present company who pays the assessment thereon will be entitled to one share of common stock and two-fifths of a share of preferred stock in the new company. As a part of this plan the outstanding bonds
906 of the company will be retired by purchase thereof by the committee at 95 % of their par value. As will be observed from a perusal of the following "agreement," the payment of the assessment will be extended over a considerable period, a fair discount being allowed upon anticipated payments.

This plan approves itself to us because—

First. It retires the debt of the company with the burdensome fixed charges, giving the stockholders the direct ownership of the property.

Second. It gives the new company a reasonable working capital.

Third. It gives for the assessment the security of a lien limited in amount, on the whole property.

Fourth. It avoids the danger of fixed charges.

In accordance with the determination of the committee that it is for the interest of stockholders that the above plan be carried into effect, we have made arrangements to secure the underwriting of the assessment by a syndicate which, upon payment of the assessment upon shares the holders of which default therein, will be enti-

tled to the securities of the new company otherwise to have been issued to such defaulting shareholders.

The foregoing has been submitted to, and has the approval of, a majority in interest of the company's shareholders, and is presented by us as a "plan for the reorganization of the San Diego Land and Town Company;" and the foregoing statement and plan are, together with the following "reorganization agreement," to be construed as one document to all intents and purposes the same as if so in form.

B. P. CHENEY, *Chairman*,
EDWARD H. MASON, *Secretary*,
CHARLES W. SHATTUCK,
WALTER L. FROST,
Committee.

907 *Agreement.*

This is an agreement by and between Messrs. B. P. Cheney, Charles W. Shattuck, Walter L. Frost, and Edward H. Mason, who are hereinafter jointly called the committee, and such owners and holders of the stock of the San Diego Land and Town Company as shall hereafter deposit their said stock in some duly constituted depositary in accordance with the terms hereof, which owners and holders are hereinafter jointly and severally called the depositors, and is to the following effect:—

Whereas the property, estates, and assets of the said company have been by the courts duly placed in the hands of a receiver for the protection of the interests of stockholders in, and creditors of, said company, and

Whereas in Boston on September 28, 1895, at a meeting of owners and representatives of owners of a large amount of the stock of said company, the said committee was duly constituted and appointed as a reorganization committee, to have charge of the reorganization of said company, with the purpose of protecting the interests of the stockholders therein, and

Whereas for that purpose said committee was by said meeting given power to formulate and carry into effect any and all plans and measures necessary therefor, and said committee has formulated and proposes to carry into effect the foregoing generally outlined "plan of reorganization."

Now this agreement witnesses that said committee, by the signature hereto of its respective members, and the said depositors, by the deposit of said stock in some depositary duly constituted and appointed as provided herein, do agree each with the other and others as follows:—

First. The committee shall duly constitute and appoint a depositary to act under this agreement, which agreement and the
908 foregoing plan are to be construed as one instrument to all intents and purposes the same as if so in form. The committee shall deposit with said depositary a copy of this agreement duly executed by said committee.

Holders of stock of the San Diego Land and Town Company may

become parties to this agreement by depositing said stock with the depositary and paying the assessment thereon, in accordance herewith, and by such deposit and the acceptance of the certificates of deposit of such depositary, such depositors shall be bound by all the terms of this agreement the same as if the signatures and seals of said depositors were duly attached hereto.

The terms "holders of stock" and "depositors" shall be construed throughout this agreement to include any person or corporation, whether acting as legal owner or in a fiduciary capacity of whatever name or nature.

Holders of stock shall at the time of depositing said stock (which shall be designated by the committee,) pay $1.00 per share on stock so deposited, and the depositary shall issue to such depositor a certificate of deposit, in a form to be approved by the committee. Thereafter at intervals of not more than one month, and for the nine months then next ensuing, at times to be designated by the committee, said depositors shall make nine equal payments of $1.00 each on each share of stock so deposited; and all said payments shall be endorsed as paid, by said depositary on said certificates of deposit. Payment of these instalments may be anticipated, and on such anticipated payments a discount at the yearly rate of six per cent. will be allowed.

Said stock so deposited must be assigned so as to vest in the committee the full legal and equitable title thereto, or so as to enable the committee to transfer said stock, provided, however, that the acceptance of the deposit of said stock shall be no admission of the genuineness and validity of the certificate of stock so deposited, the committee expressly reserving the right to return any stock so deposited, and recall the certificate of deposit issued therefor upon a tender of the amount paid on said stock. And no statement or figures contained in said plan or this agreement shall be considered as a representation or warranty inducing any holder of stock to become a party to this agreement.

909

Each depositor expressly agrees that such depositor will, at the request of the committee, execute any and all transfers, powers of attorney, and documents necessary to vest in the committee perfect title to said stock deposited by such depositor.

Said certificates of deposit shall be transferable in a manner to be approved by the committee; and the holders of such certificates by due transfer shall to all intents and purposes be parties to this agreement. Such certificates may be treated by the committee and depositary as negotiable instruments, conferring full and absolute title on the holders thereof, and neither the committee nor the depositary shall be affected by any notice to the contrary.

The committee, as soon as practicable, will take the necessary action to have said certificates of deposit listed on the Boston stock exchange.

Second. Holders of said stock, who shall not have deposited their stock within the time fixed by the committee, shall not thereafter be entitled to become parties to this agreement. Depositors who shall fail at the times designated by the committee to make payment

of all or any of the nine equal instalments of $1.00 each, as above provided, shall cease to be entitled to any rights under this agreement, and shall forfeit the certificate of deposit and the stock on which such failure is made and all amounts paid thereon. In any such case, the committee may, on such terms as it approves, dispose of the stock so deposited by such depositor, and the securities otherwise to have been issued to such holders of stock and depositors, the funds obtained by such forfeiture and such sale to be used by the committee for the purposes of the reorganization.

The committee may contract with any persons or corporations for the underwriting of the entire assessment upon such terms as the committee may approve.

Third. The committee shall determine whether a sufficient amount of said stock has been deposited in accordance with the terms thereof to warrant said committee in carrying the plan into effect. In case the committee decides that the plan shall be carried into effect, notice shall be given to the depositors in accordance with the general manner herein provided for giving notice to such depositors.

In case the committee decides that the plan cannot be carried into effect, then due notice shall be given as aforesaid, and all the said stock deposited in accordance herewith, together with all amounts paid thereon, shall be returned to the properly entitled depositors; provided, however, that, in any event, the committee shall be entitled to and shall pay from the assessment then collected on said stock the necessary and proper charges and expenses incurred by the committee in its work, and the committee shall further be entitled to borrow on the security of the stock so deposited the amounts necessary to defray such charges and expenses. Any such return of stock and amounts paid thereon, or the proportionate balance thereof, after the payment of such charges and expenses as aforesaid, shall be made through the depositary whose certificates of deposit are outstanding, or its agents.

Fourth. In case the committee decides to carry the plan into effect, as aforesaid, it shall have power to form a new corporation in such manner as to the committee may seem advisable, and to take such measures as may be necessary to transfer the property of the said San Diego Land and Town Company to such new company, or the committee may take such other measures as may seem to it advisable to accomplish reorganization on the general lines of said plan. For any and all of such purposes, and to further any of the work of the committee in the reorganization of said company, the committee may, with the funds collected from the assessment on said stock, purchase any or all the outstanding interest-bearing securities of the said land company, or any certificates of indebtedness of the receiver of the said land company; and at any sale, judicial or otherwise, of the property of said land company, the committee may bid, and may make payment in the funds aforesaid, and in the securities of said land company and in said receiver's certificates in the possession of the committee or of the depositary. And the committee shall have power to do all other acts and things,

in the management of said funds and securities, necessary to the carrying into effect of the plan.

In the event of the formation of a new company as aforesaid, the securities of said new company, so far as necessary, shall be delivered by the committee to the depositary, to be by it delivered to the properly entitled depositors, the depositor of each share of stock of the said land company, upon full compliance with the terms hereof, to be entitled to one share of common stock and two-fifths of a share of preferred stock of said new company.

In the event of the formation of a new corporation as aforesaid, the committee shall name the first board of directors thereof; and in consideration of the issuance of such new securities and the further consideration of the obligations of said committee herein, the depositors jointly and severally hereby irrevocably constitute said committee as the attorney of said depositors with power to vote for the board of directors of such new corporation at the first annual meeting thereof.

The committee shall prescribe the terms and provisions of any and all new securities that may be issued under this plan and agreement or under any modification hereof.

Fifth. This agreement shall not be construed to create
912 any trust, liability, or obligation to, or in favor of, any person or corporation except the committee, the depositary, and the holders from time to time of the certificates of deposit issued as aforesaid. None of the receiver's certificates, securities, or claims purchased or acquired under this agreement shall thereby be deemed satisfied, paid, discharged, or extinguished, nor shall any legal right or lien be deemed thereby released, waived, or surrendered; but the committee, for the purposes hereof, shall have all the rights of full and absolute owners of said receiver's certificates, securities, and claims. The depositors respectively agree that the legal title to all stock of said land company deposited hereunder shall vest in the committee, and that the committee shall have, and exercise with respect thereto, all the rights and powers of absolute ownership, and may transfer the same or any part thereof into the name of the committee or any person or corporation the committee may designate.

Sixth. The committee shall have power to fix the time when said stock of said land company must be deposited hereunder and when the assessments thereon shall be paid; to extend the terms hereof in general or special cases in its discretion; and to change the terms and conditions of the plan and agreement in such manner as may seem to it advisable, notice of such change to be given holders of stock and depositors in the manner herein generally provided.

At all meetings of the committee, the acts of three members thereof, present in person or by proxy, shall be the acts of the committee. The number of members shall never be less than four, and all vacancies from whatever cause shall be filled by appointment made by the remaining members or by the depositary, if there be no remaining member. None but a stockholder of said land company or a depositor shall be a committee member.

Seventh. All notices to holders of stock and depositors, as
913 required herein, or as necessary in the work of the committee, shall be given by publication for five successive days in two daily newspapers published in the city of Boston and in one daily newspaper published in the city of New York, and publication in the manner aforesaid shall constitute due and proper notice for all the purposes hereof.

Eighth. While the committee will endeavor in good faith to carry out the terms of said plan and this agreement, neither the committee nor any of the members thereof shall be held personally responsible for the execution thereof. Neither the committee nor any member thereof shall be liable for the acts of any other member or of the depositary, nor for any error of judgment or mistake of law, but each shall be liable only for his wilful misfeasance. No depositary shall be liable for the acts of the committee or of any of the members thereof.

Present or future members of the committee may be pecuniarily interested in any of the stock, securities, receiver's certificates, or claims herein referred to, and in matters which are the subject of this agreement, and may make contracts with the committee and be members of any syndicate and share in the profits thereof.

This agreement shall bind the committee, the depositary or depositaries, and the respective depositors and their, and each of their, successors, heirs, executors, administrators, and assigns.

In witness whereof, the committee has, by its respective members, signed this agreement, and the depositors have deposited the said stock of the said land company as above set forth.

914 (Endorsed:) U. S. cir. ct. S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit J 1. Offered in evidence June 14th, 1899. Geo. J. Leovy, special examiner.

915 San Diego Land and Town Company.

Reorganization.

BOSTON, MASS., *December* 9, 1895.

Pursuant to the provisions of the reorganization agreement, the committee announces that arrangements have been made with the Boston Safe Deposit and Trust Company to act as depositary, and that company has been duly appointed and constituted as depositary under the reorganization agreement.

The committee also gives notice, under the terms of said agreement, that stock of the land company must be deposited with said depositary on or before January 20, 1896, at which time the first instalment of $1.00 on the $10.00 assessment must be paid. The depositary will issue therefor its certificates of deposit. Under the terms of the said agreement the remaining instalments must be paid as follows:

$1.00	February	20, 1896.
$1.00	March	20, 1896.
$1.00	April	20, 1896.
$1.00	May	20, 1896.
$1.00	June	20, 1896.
$1.00	July	20, 1896.
$1.00	August	20, 1896.
$1.00	September	20, 1896.
$1.00	October	20, 1896.

On all anticipated payments a discount at the rate of six per cent. per annum will be allowed, as provided in said agreement. Payment of the assessment or any of the instalments thereof may be made in the bonds of the land company or in the certificates of indebtedness of the receiver thereof. Said bonds will be received at ninety-five per cent. of their par value plus interest to date
916 of payment; and said certificates at par plus interest to date of payment.

B. P. CHENEY, *Chairman*,
EDWARD H. MASON, *Secretary*,
CHARLES W. SHATTUCK,
WALTER L. FROST,
Committee.

(Endorsed:) U. S. C. court. S. D. L. & T. Co. *vs.* Jasper *et al.* Complainant's Exhibit J 2 offered in evidence June 14, 1899. Geo. J. Leovy, special examiner.

917

Name of system.	Class of system.	Year of construction.	Cost, $.	Value in 1897.	Amount of water in M in.	No. of acres irrigated.	No. of acres to 1 M in.	Cost per 1000 gall., value in 1897.	6 % on value in 1897, $.	Operating & maintenance in 1897, $.	Amount ch'g'd per 1000 gal. per 24 hrs.	Amount chargeable exp. & 6 %.
North Fork Co.....	Gravity.....	1888	48000	38400	520	3000	5.77	9.62	2304	4060	0.44	0.44
Lytle Creek W. & I. Co.....	"	1887	78000	51480	500	5000	10.00	8.00	3089	11250	1.01	1.01
Riverside Water Co. irrigation.	"	1880	.....	822118	3000	9000	3.00	21.14	49327	30094	1.16	0.90
Santa Ana Valley I. Co.....	"	1874	150000	150000	2000	11000	8.	5.79	9000	23000	0.56	0.51
Anaheim Union W. Co.....	"	1872	259585	188049	1200	8000	7.00	12.04	11282	23930	0.93	0.86
Alessandro irrigation dist.....	Gravity & pressure	1893	.....	215000	700	2800	4.00	23.70	12900	5000	1.24	0.93
Riverside domestic system.....	Pressure.....	1895	.....	167000	100	.....	.....	121.14	10020	7768	.....	3.76
S. D. Land & Town Co.....	"	1888	1026000	769500	800	6000	7.4	74.25	46170	170566	.....	.....
" " "	.....	"	1026000	769500	640	4800	7.4	76.50	(46170)	(17056)	.....	3.00
Nat'l City deducted.....	"	"	180000	135000					11412	52815		
San Diego Flume Co.....	Gravity.....	1889	1500000	1050000	800	12000	15.00	101.27	63000	25000	2.31	2.9

(Endorsed:) S. D. L. & T. Co. *vs.* Jasper *et al.* U. S. cir. court.—Complainant's Exhibit J 4 Offered in evidence & filed June 15, 1899. Geo. J. Leovy, special examiner.

STATE OF MAINE:

Certificate of Organization of a Corporation under the General Law.

The undersigned, officers of a corporation organized at Kittery county York, Maine, at a meeting of the signers of the articles of agreement therefor, duly called and held at said Kittery, on Tuesday the 20th day of April, A. D., 1897, hereby certify as follows:

The name of said corporation is the San Diego Land & Town Co.

The purposes of said corporation are the purchase, improvement & sale of real estate, in lots or otherwise, the promotion and encouragement of agriculture & horticulture, and the production, purchase, conversion & sale of agricultural & horticultural products, the purchase and operations of mines, for the production of fertilizing materials, or otherwise, the production, manufacture and sale of commercial products, the supplying of water to the public and otherwise, for that purpose, to purchase or acquire water & water *rates* and all privileges and easements appertaining thereto and to acquire, purchase or construct dams, canals, pipe lines & water systems & to sell, rent and distribute such water to the public or otherwise, by way of water right, or in any other manner and to sell and convey such dams, canals pipe lines or water systems to the public or otherwise, the purchase establishment & maintenance of a hotel or hotels, the promotion of immigration, the acquirement, construction and maintenance of buildings, wharves or other structures, the purchase of the entire assest & property of a corporation organized & now existing under the laws of the State of Kansas, known as the San Diego Land & Town Co. and the continuation of the business now carried on by that company, and the doing of all other lawful acts & things necessary or desirable to be done to carry into effect
920 the above corporate purpose.

The amount of capital stock is 3,150,000—divided 900,000 preferred, 2,250,000 common.

The amount of capital stock already paid in is—none.

The par value of the shares is twenty-five dollars.

The names and residences of the owners of said shares are as follows:

Name.	Residence.	No. of shares.
B. P. Cheney	Boston, Mass	5
Walter L. Frost	Boston, Mass	5
C. W. Shattuck	Winchester, Mass	5
W. S. Seccumb-	Peterboro, N. H	5
Thomas A. Fox	Boston, Mass	5
H. R. Mandell	Newton, Mass	5
		30 shares
Shares of capital unsubscribed		125970
Total		126000

Said corporation is located at Kittery, in the county of York, Maine.

The number of directors is nine, and their names are so far as elected B. P. Cheney, R. H. Weld, Walter L. Frost, Edward H. Mason, C. W. Shattuck, W. S. Seccumbe, Thomas L. Fox, H. R. Mandell.

The undersigned B. P. Cheney is president; the undersigned H. R. Mandell is treasurer; and the undersigned *R.* P. Cheney, Walter L. Frost, C. W. Shattuck, W. S. Seccumbe, Thomas A. Fox, H. R. Mandell, are a majority of the directors of said corporation. And Moses A. Safford of said Kittery is clerk of said corporation.

Witness our hands this 20th day of April, A. D., 1897.

B. P. CHENEY, *President*,
H. R. MANDELL, *Treasurer*,
921 B. P. CHENEY,
WALTER L. FROST,
C. W. SHATTUCK,
W. S. SECCUMBE,
H. R. MANDELL,
THOMAS A. FOX,
Directors.

YORK COUNTY, *ss*:

APRIL 20TH, A. D. 1897.

Then personally appeared B. P. Cheney, H. R. Mandell, Walter L. Frost, C. W. Shattuck, W. S. Seccumbe and Thomas A. Fox, and severally made oath to the foregoing certificate, that the same is true.

Before me,

MOSES A. SAFFORD,
Notary Public, Justice of the Peace.
[NOTARIAL SEAL.]

STATE OF MAINE,
ATTORNEY GENERAL'S OFFICE, *April* 20, *A. D.* 1897.

I hereby certify that I have examined the foregoing certifificate, and the same is properly drawn and signed, and is conformable to the constitution and laws of the State.

WILLIAM T. HAINES,
Attorney General.

STATE OF MAINE,
OFFICE OF SECRETARY OF STATE.

I hereby certify that the foregoing is a true copy from the records of this office.

In testimony whereof, I have caused the seal of the State to be hereunto affixed.

Given under my hand at Augusta, this twenty-eighth
[SEAL.] day of April, in the year of our Lord one thousand eight hundred and ninety-seven and in the one hundred and
922 twenty-first year of the Independence of the United States of America.

S. J. CHADBOURNE,
Deputy Secretary of State.

993—Copy—(Name of corporation, The San Diego Land & Town Co.)

YORK, *ss:*

Registry of Deeds.

Received April 26, 1897, at 5h, — m. p. m.
Recorded in vol. 5 page 91.
Attest. JUSTIN M. LEAVITT, *Register.*

A true copy of record.
Attest. JUSTIN M. LEAVITT, *Register.*

STATE OF MAINE,
OFFICE OF SECRETARY OF STATE,
AUGUSTA, *April* 27, 1897.

Received and filed this day.
Attest. S. J. CHADBOURNE,
Deputy Secretary of State.

Recorded — vol. 26 page 233.
Filed Sep. 16, 1897.
WILL H. HOLCOMB, *Clerk,*
By WALTER M. EDWARDS, *Deputy.*

(Endorsed:) Defendants' Exhibit J 3. U. S. circuit court. S. D. L. & T. Co. *vs.* Jasper *et al.* Offered in evidence by defendant June 14 1899. Geo. J. Leovy, special examiner.

923 *Water Right Contract.*

This agreement, made and entered into this — day of —— 189-, by and between the San Diego Land and Town Company, a corporation existing under and by virtue of the laws of the State of Kansas, and the owner of certain water and water rights and a system for the delivery of water to consumers, in the county of San Diego, State of California, of the first part, and —— —— of ——, county of —— State of ——, party of the second part, witnesseth: That the party of the first part agrees to and does hereby sell to the party of the second part a water right to one acre foot of water per acre per annum, for each and every acre of the real estate hereinafter described, to be delivered through the pipes and flumes of the party of the first part at .....
.....
.....
.....

for the sum of — dollars, payable as follows:

For which water right the party of the second part agrees to pay the sum of six dollars ($6.00) per acre per annum until such time as he shall elect to pay the sum of one hundred ($100) dollars per acre therefor, and upon the payment of said one hundred dollars per acre, said annual payment shall at once cease, it being understood that the said six dollars per acre is to be paid for said water right above, and is to be in addition to the monthly or yearly rental for the use of the water.

924 Provided that the said sum for a water right or an interest charge thereon shall not be payable until and from the date it is determined by the court or courts having jurisdiction in the premises, that the party of the first part may legally contract for and collect the same, and provided further, that the party of the second part may instead of paying said water-right charge, pay an interest charge thereon of 6 % per annum, payable at the time of paying the annual rates for the water use, and provided further that in case said question shall be decided in favor of first party by said courts, on appeal if one should be taken, the second party for a period of sixty days after such decision shall have the right to annul this contract and by so doing shall forfeit all rights hereunder.

.....

.....

Provided the party of the first part may at its option change the place of delivery of said water so long as the same is near the highest point on the lands for which the water is delivered, and provided further, that the same shall be delivered under and in accordance with the rules and regulations established from time to time by the party of the first part.

Said water right is sold for the use of and to be appurtenant to the following-described real estate, now owned by the party of the second part in the county of San Diego, State of California, to wit:

.....

.....

.....

.....

.....

.....

925 .....

consisting of — acres.

And it is expressly understood and agreed that the water right hereby sold shall belong to said described real estate and be used thereon, and not diverted therefrom, or used on any other lands.

In consideration of the foregoing stipulations and agreements the party of the second part agrees and binds —self, — heirs, executors and assigns, to pay the sums above specified, promptly as the same, and each of them, fall due, and that — will in all things comply with and perform the terms and conditions of this agreement on — part to be performed, and that — and they will promptly pay all annual water rates and charges for the water to which — is entitled under and by virtue of this agreement, at rates fixed by the party of

the first part, as allowed by law, and at the times, in the manner, and according to the rules and regulations made and adopted by the party of the first part, the annual rental for the amount of water to which the party of the second part is entitled under this contract to be paid whether the same is used or not, and also to pay for all water used by — on said land for domestic purposes at the rates fixed by the party of the first part and allowed by law.

It is further agreed that the amounts hereby agreed to be paid for said water right, and for the rates for the water, shall be a charge and lien upon the real estate above described, and run with and be binding thereon, in the hands of the party of the second part, — heirs, executors and assigns, in the same manner, and to the same extent, as if a mortgage were given to secure the payment thereof.

926 The payments above provided for, and each of them, must be made to the party of the first part, at its office at National City, in the county of San Diego, State of California.

And it is expressly stipulated and agreed that time is of the essence of this contract, and in case the party of the second part, — heirs, executors or assigns, shall fail to make the payments aforesaid, or any of them, or any part thereof, at the times and place above specified, then this contract shall, at the option of the party of the first part, be and become entirely null and void, and the party of the first part shall have the right to shut off and cease to deliver said water; or the party of the first part may, at its option, enforce this contract by action to collect the sums due, and the enforcement of its lien therefor upon said lands, and in case it so elects to enforce this contract the failure to pay any of the sums falling due for said water right or any part thereof, shall render the whole amount of all of the payments therefor immediately due and collectible.

It is further stipulated and agreed that no assignment of this contract shall be valid except the same be made with the conveyance of, and to the owners in fee-simple of, said real estate, and that any person to whom this contract is assigned, or said real estate and water right conveyed, his or her heirs and assigns shall become personally liable to pay the amounts agreed by this contract to be paid.

And any assignment or conveyance of this contract or the water right herein sold, to any person, not the owner in fee-simple of said real estate, shall be absolutely void, and any such assignment or conveyance shall forfeit all rights under this contract; and the party of the first part may, immediately, shut off and cease to furnish water under this agreement.

927 In witness whereof, the parties have hereunto set their hands and seals this — day of ——, 18—.

—— ——.
—— ——.
—— ——.
—— ——.
—— ——.

STATE OF CALIFORNIA, } ss:
County of San Diego, }

On this — day of —— in the year of our Lord, one thousand, eight hundred and ninety-— before me, —— ——, a notary public, in and for the county of San Diego, and State of California, residing therein, duly commissioned and sworn, personally appeared —— —— personally known to me to be the — of the corporation that executed the within instrument, and acknowledged that such corporation executed the same.

In witness whereof, I have hereunto set my hand, and affixed my official seal, the day and year in this certificate first above written.

—— ——,
Notary Public.

(Endorsed:) Protestants' Ex. "B" No. — Water-right contract. The San Diego Land and Town Company to —— —— Filed Oct. 9, 1897 Will H. Holcomb clerk by J. M. Dodge deputy. 928 S. D. L. & T. Co. *vs.* Jasper *et al.* U. S. C. Ct. No. 1 (a) Geo. J. Leovy special examiner.

929 The San Diego Land & Town Company hereby establishes the following rates and classification to govern the supply of water by this company and payment therefor, the same to take effect Jan'y 1st, 1896.

First.

Dwellings, tenement-houses, flats and other apartments, the same being occupied by not more than four persons, one dollar ($1.00) per month, and for each additional person fifteen cents $.15 per month.

Second.

Hotels and lodging-houses, in addition to family rates, fifteen cents ($.15) per month per bed.

Boarding-houses in addition to family rates, fifteen cents ($.15) per month for each person.

Restaurants and coffee-houses, one dollar and fifty cents ($1.50) to three dollars and fifty cents ($3.50) per month.

Saloons and bars, two dollars ($2.00) per month.

Third.

Stores, one dollar ($1.00) to one dollar and fifty cents ($1.50) per month.

Offices, fifty cents ($.50) to one dollar ($1.00) per month.

Warehouses, one dollar ($1.00) to two dollars and fifty cents ($2.50) per month.

Dental rooms, fifty cents ($.50) to two dollars ($2.00) per month.

Bakeries, one dollar and seventy-five cents ($1.75) per month for each twenty-five barrels of flour.

Wagon and blacksmith shops, one dollar ($1.00) per month for first forge; fifty cents ($.50) per month for each additional.

930 Drug stores, one dollar ($1.00) to two dollars and fifty cents ($2.50) per month.

Barber shops, seventy-five cents ($.75) per month for first chair; forty-five cents ($.45) per month for each additional chair.

Fourth.

Bath-tubs—private—thirty-five cents ($.35) per month.

Bath-tubs in hotels, public houses, boarding-houses and barber shops, etc., one dollar and fifty cents ($1.50) per month.

Water-closets—private—fifty cents ($.50) per month.

Water-closets—public—two dollars ($2.00) per month.

Water-closets in hotels and public buildings, one dollar ($1.00) per month.

Urinals—private—twenty cents (.20) per month.

Urinals—public—fifty cents ($.50) per month.

Public water-troughs one dollar and fifty cents ($1.50) per month.

Fifth.

Horses and cows, for each of first two, thirty-five cents ($.35) per month.

For third, twenty-five cents ($.25) per month.

For each additional, two dollars ($2.00) per annum.

For slacking lime, for each barrel, twenty cents ($.20).

For slacking cement, for each barrel, ten cents ($.10).

For wetting brick, for each thousand, fifteen cents ($.15).

Sixth.

The following rates are established as the charge for water measured by meters for all uses other than the irrigation of acre property:

1 to	5,000	gal. per month,	$.40	p. 1000
5,000 to	15,000	" "	.30	"
15,000 to	100,000	" "	.20	"
931 100,000 to	500,000	gal. per month,	$.10	p. 1000
All over	500,000	" "	.05	"

Seventh.

When water is furnished to hotels, steam-engines, gas machines, or works, wash-houses (Chinese or otherwise), street and sidewalk sprinkling, washing stores and ship fronts, and for irrigating where satisfactory rates cannot be agreed upon, meter rates shall gover

Eighth.

For water used for purposes other than those above specified this company will charge reasonable rates as nearly as possible in conformity to rates fixed above for similar purposes.

Ninth.

On lot and block property the rates for water used for cultivating gardens, lawns and grounds shall be three dollars and fifty cents ($3.50) per annum for the first lot and a like amount for each addi-

tional lot, owned or cultivated by the same consumer, unless such additional lot or lots are used for orchard purposes and growing small fruits and vegetables, in which case the rate shall be one dollar and fifty cents ($1.50) per annum for each additional lot after the first two lots up to a total of five lots, and one dollar and forty cents ($1.40) for each of the sixth to the twentieth lots inclusive.

Provided, however, that where a right to the easement and flow of water for purposes of irrigation has heretofore been acquired from this company on any acre property which is classified by the provisions of the rules and regulations of the company as lot and block property, the annual rates for water used on said property shall be reduced by six per centum of the value of said right computed according to the subdivision of lot and block property, and the
932 value of such right as recited in said rules and regulations.

Tenth.

For the purpose of fixing rates for irrigating acre property the lands of that character are classified as follows:

All lands to which the easement and flow of water for irrigation has been or shall be annexed by the consent or voluntary act of this company shall constitute the first class.

All lands to which the easement and flow of water for irrigation purposes has not been or shall not be annexed by the consent or voluntary act of this company shall constitute the second class.

For irrigating acre property of the first class the rate is hereby fixed at seven dollars ($7.00) per acre per annum, and for a less time than one year such rate as may be agreed upon between this company and the consumer.

For irrigating acre property of the second class the rate is hereby fixed at seven dollars ($7.00) per acre per annum, and for a less time than one year such rate as may be agreed upon between the company and the consumer. In addition to said annual rate for water used upon lands of said second class there shall be paid upon the lands of said class, an annual charge equal to six (6) per centum of the value of the right to said easement, and flow of water for irrigation, which said value is to be taken as one hundred dollars ($100.00) per acre.

The domestic rates on acre property shall be in addition to the charge for water for irrigation.

Meters for the determination of the amount of water used for which the rates are prescribed by this clause may be demanded by the consumer, and will be applied by this company in accordance with the provisions of the said rules and regulations.

The furnishing of water and the collection of rates therefor
933 under the foregoing schedule will be subject to the said rules and regulations of this company.

C. D. LANNING,
Receiver San Diego Land & Town Company,
By JOHN E. BOAL,
Receiver's Agent.

(Date) Dec. 26″ 1895.

(Endorsed:) Petitioners & Protestants' Exhibit "C" Filed Oct. 9/97 Will H. Holcomb clerk by J. W. Dodge deputy. S. D. L. & T. Co. *vs.* Jasper U. S. C. C. Ct. No. 2 (*a*) Geo. J. Leovy special examiner.

934 *Rules and Regulations of the San Diego Land and Town Company's Water Supply, National City, California.*

935 Rules and regulations of the San Diego Land & Town Company's water supply, National City, California.

January, 1895.—Garrett & Smith, printers, San Diego, Cal.

936 *Information for Water-takers and Those Who Contemplate Becoming Such.*

1. The consumer must pay for connection from main to curb, which will be laid by the company.

2. Care should be taken to see that the stop-boxes at the curb (where water is turned on and off), are in order, with covers securely fastened, and kept from being covered by sidewalk or rubbish, as damage is frequently done by bursted pipes where water cannot be turned off on account of these stop-boxes being inaccessible.

3. In case a pipe bursts inside a building, water can be turned off by occupants at a stop and waste valve, which will be found in the pipe where it first passes through the cellar wall.

4. Consumers would do well to see that this valve is accessible and in working order, and also that employees and servants are made familiar with its location and use.

5. Consumers are cautioned against the waste of water. The supply for wash basins, closets, urinals, baths or hydrants must not be left running; nor must the water be kept running in warm weather, under the fallacy of getting cooler water thereby. A moment's run will empty so much of the service pipe as extends above the ground, after which further running is waste. Bear in mind that water delivered to your premises under pressure has an actual intrinsic or mercantile value.

937 6. Aside from all economic considerations, such as the injury to property through flooded cellars, etc., it is highly desirable from a sanitary point of view that prompt attention be given to leaky and water-wasting fixtures. The close relations of certain forms of disease to saturated dwelling sites is well understood. Thus, in the injudicious sluicing of sidewalks, gutters, etc., is furnished the one element needed to convert the street dirt collected under the hot sun into putrescent matter emitting the poisonous germs of disease.

7. If it is desired from any cause to discontinue a closet, bath, urinal or other fixture, have the same disconnected by the plumber and the proper report made to the office, when the charge therefor will be removed. Should it be the hose service that is not desired, have the plumber remove the connection; otherwise, so long as this remains on the fixtures, the rate must be charged.

8. The policy of the company will be to encourage the use of meters in the sale of water, as being altogether the most equitable and satisfactory method of its disposal, besides being an invaluable auxiliary in the administration of that most important branch of water-works management, the suppression of water waste. The company, therefore, most earnestly recommends the use of meters, especially among large consumers.

Rules and Regulations.

The San Diego Land & Town Company have adopted the following rules and regulations, which must be observed by all persons desiring a connection with the water mains of the company.

Rule I.

The following regulations shall be considered a part of the
938 contract with every person who takes water, and every such person, by taking water, shall be considered to have expressed his consent to be bound thereby. They shall be strictly and impartially enforced by such officers or agents as the company may appoint, and to this end said officers or agents shall have unrestricted access, at proper hours, to all premises supplied by the company. These rules may be revised, amended, or added to as may become necessary, and for their violation the company reserves the right to turn off the water without notice, notwithstanding the rate may have been paid, and to withhold the supply until satisfactory settlement shall be made.

Rule II.

All applications for service attachments to the water mains must be made upon the printed form provided by the company, and signed by the contracting party, or his authorized agent. They shall specify fully and truly the particular purposes for which the water is required, and the aggregate annual rental thereof. This application, when accepted by the company, shall operate as a contract in due form between the parties thereto, until the first of July then next following, when it may be terminated at the request of either party, notice to be served in writing, but in case no such request is made, then the same shall continue in force for one year thereafter, or so much thereof as the premises shall be continuously occupied, and so on from year to year, until such request is made; which request, when made, shall be to terminate the contract on the following July 1st; provided, however, that where water is furnished under said application, after the expiration of the year ending June 30th, specified therein, the same will be charged and shall be paid for at the rates fixed by this company or the proper authorities.

939 In case additional service shall be required after the execution of the contract the rate therefor shall be added to the former contract, or a new contract made. In case the premises become vacant the contract will be annulled.

Rule III.

No contract will be made for supplying water which does not include the various purposes for which the same is available. No consideration will be given to the presence of a well or cistern on the premises, and this company will not, in computing the water rates upon any property furnished with water, and where a full supply is offered by it, make any allowance for any other water supply upon the property so furnished with water, but will compute the rates upon a basis of the full use, by said property, of the water supply of this company.

Rule IV.

All service pipe must be laid deep enough to run under the curb, if extended into the street, not less than six inches below the same.

Rule V.

When any job of plumbing shall be completed and the work approved by the inspector of the company, and the water tax paid, the water shall be turned on by an authorized agent of the company, and not otherwise.

Violation of this rule constitutes a misdemeanor.

Rule VI.

No water-pipe connection with the mains of the San Diego Land & Town Company shall be extended or furnished with additional outlets, or in any way altered, without a written permit signed
940 by the inspector of the company; and any person receiving such permit will be required to report, within forty-eight hours after the completion of the same, to the office of this company, any changes that have been made; in default of which the water will be shut off and not turned on again until such report has been made and the sum of $1.00 paid for the closing and opening of the street stop-cock.

Rule VII.

All water used through any service will be furnished by the company and must be paid for by the consumer under one application; but the rates of each water-taker to whom the water is furnished through said service shall be computed as if covered by a separate application.

Rule VIII.

No hydrant, goose-neck, hose bibb, or hose attachment, shall be placed in any yard or area of any premises, so situated, as to be accessible to persons living in or occupying neighboring premises, nor shall water-takers be allowed to supply water to others, except by a special permit by this company.

NOTE.—The water company agrees to furnish water to certain specified premises, for certain specified uses, for a certain specified sum. If, therefore, consumers furnish other people, or supply water

for animals or sprinkling, or washing wagons, or to brick or stone masons or plasterers, or permit it to be taken without permission from the company, it is a violation of this contract, and consumers of this class offending will be required to pay the full price of water for 30 days, or have the water shut off and forfeit the amount paid for license for first offense.

941 Rule IX.

All persons taking water shall keep their own service pipes, stop-cocks and apparatus in good repair, at their own expense; and it is expressly stipulated that no claim shall be made against the company by reason of any derangement of any service pipes or other apparatus in connection with them.

Rule X.

Licenses for water for building purposes will be issued only upon a certificate of the architect or superintendent of the work to be done, specifying the number of bricks, perches of stone and square yards of plastering for which water will be required; and in all cases, payment for the water shall be a condition precedent to the issuance of the license.

Rule XI.

The company reserves the right at any time, without notice, to shut off the water in its mains for the purpose of making repairs or extensions, or for other necessary purposes; and all persons having boilers on their premises, depending on the pressure in the pipes to keep them supplied, are hereby cautioned against the danger from collapse.

Rule XII.

All outlets in the service pipes must be provided with the air chamber, not less than eighteen inches long on the ground floor, and twelve inches long on the second floor, where such outlets are connected directly with the street main; if connected with a tank, this rule will not apply. All air chambers must be securely capped
942 with a suitable fitting firmly turned on yarn, or otherwise made perfectly tight. No soldered air chamber will be allowed on service pipes connected with the mains.

Rule XIII.

1. This company supplies water for uses of two distinct characters, to wit: 1st, for domestic and kindred purposes; 2nd, for the irrigation of lands used for the purpose of raising crops. The furnishing of water for irrigation involves in some cases, the conveyance by this company and the acquirement by the land irrigated of a right to the easement and flow of water for irrigation, known as a water right. This said right to the easement and flow of water for irrigation (and consequently water for irrigation) will not be sold or conveyed (or water for irrigation be furnished) by the company or acquired by any consumer or consumers, except upon payment to the company of $100.00 per acre for said right or of an annual in-

terest charge of six per cent. on said amount, as the company may elect.

The payment of the charge for the right to the easement and flow of water for purposes of irrigation shall entitle the consumer paying such charge to a flow of 350,000 gallons per acre per annum, in accordance with the right heretofore conveyed by this company, to be delivered in accordance with its reasonable rules and regulations. Water for irrigation in excess of said amount of 350,000 gallons per acre per annum, may be supplied by this company, and if so supplied shall be paid for by the consumer in accordance with the annual rates based on the use of said amount of 350,000 gallons; but water in excess of said amount will be supplied by the company and paid for by the consumer on the express condition, understanding and agreement, that such supply of said excess and the payment therefor, shall not entitle the consumer so using said excess
943 and paying therefor to a right to the easement and flow of such excess over said amount of 350,000 gallons.

On all lands which have acquired or may hereafter acquire from this company a right to the easement and flow of water for irrigation, the company will collect an annual charge of $4.00 per acre whether or not the water under such right be actually used, and in such case if said charge be not paid by the consumer, or person owning such land, for a period of two years, the right to the easement and flow of water on said lands shall be forfeited to and may again be offered for sale by this company.

The domestic rates on all lands supplied with water for irrigation shall be in addition to the irrigation rates, but not subject to the provisions regarding the supply of water by meter.

2. The lands or property supplied with water by this company are of two distinct characters, to wit: 1st, lot and block property, as generally subdivided in town sites, commonly used for commercial and residence buildings with surrounding lawns and ornamental grounds; 2d, larger areas, commonly termed acre property, used for growing crops and hence generally using water for irrigation, for which latter class the basis for the supply and use of water for irrigation, and the acquirement of a right to the easement and flow of water is above set forth in this rule.

For the purpose of classification of acre and lot or block property, all areas of 2½ acres or less, the measurements to be taken from center of street to center of street, shall be considered lot and block property, and classified as such, and all areas in excess of said amount of 2½ acres, measured as above provided, shall be considered acre property and classified as such.

944 Rates for lot and block property shall be based upon the common subdivision of 2½ acres, measured as above provided, into a block of twenty lots.

This company will not accept from any one consumer or joint consumers, or consumers having allied or common interests, an application or applications for water to be furnished on the basis of the rates for lot and block property for a larger area than the above-mentioned block of 2½ acres measured as above provided.

The rates for lot and block property are made and the water for such property will be furnished by this company upon the express condition that the water so furnished shall not be considered as furnished for irrigation within the meaning of section 552 of the Civil Code of California, or any other statute or law; and upon the further condition, that the furnishing of such water shall not annex, and shall not be considered by the consumer or applicant as annexing, to the said lot and block property a right to the perpetual easement and flow of such water for purposes of irrigation, or any other purpose whatever.

Property classified as lot and block property, and which had not prior to such classification acquired from this company a right to the easement and flow of water for purposes of irrigation, shall not be classified as acre property, except upon the payment of the charge for the right to the easement and flow of water for irrigation as above provided in this rule.

On such lot and block property as, prior to classification as such property, has acquired or hereafter may acquire from this company such a right to the easement and flow of water for irrigation, this company will collect one-half the annual rates established for such property, whether or not the water under such right be actually used, and in such case if such rates be not paid for a period of two years, the right to the said easement and flow of water on said property shall be forfeited to and may again be offered for sale by this company.

945

The said right to the easement and flow of water on the lands so classified as lot and block property shall be subject to the same limitation of amount of annual flow as is above set forth in this rule, to wit: 350,000 gallons per acre per annum, and the supply by this company and use and payment therefor by the consumer of water in excess of said amount shall not convey a right to the easement and flow of such excess.

Rule XIV.

In supplying water, the consumer must provide conduits of sufficient size to take from the company's mains the water contracted for in the time that may be apportioned to him, and the obligation of the company in delivering water shall not extend to a greater height and pressure than can reasonably be attained, taking into consideration the varying hydraulic pressure of the reservoir, the distance from the source of supply, and the full use of the feed-mains and distributing system. The company reserves the right to specify the height at which water shall be delivered.

This company in all cases supplies water only upon the express condition that the supply shall be subject to any special contract at any time existing between the company and the consumer, or any former consumer on the same property, or any person or persons by virtue of an agreement with whom was constructed the pipe line, by which water was or is supplied to said property.

Rule XV.

The company expressly reserves the right to so apportion
946 the time for delivering water to consumers as to best serve all concerned, and may require a full month's supply to be taken within such time as it may specify, and in no case, except under a special agreement, will the company contract to furnish a supply under constant pressure; it also limits the quantity to be delivered in one month to not more than one-fourth of the annual amount contracted for.

Rule XVI.

This company reserves the right in all cases to apply meters at its own cost, and to collect all meter rates, established by the company or by proper authority.

Any consumer shall have the right to demand a meter and pay meter rates for water upon tendering to this company the sum of five dollars ($5.00), for placing and connecting the same to the supply-pipe of such consumer; and upon the said demand and the tender of said sum by any consumer, this company will furnish, place and maintain a meter; but where a meter is so placed at the consumer's request, the consumer shall pay a monthly charge for the use, cleaning and repairing of the meter, which charge shall be in accordance with the following schedule:

One-inch meters and smaller,				$ .35	per month.
Two	"	"	"	.50	"
Three	"	"	"	1.00	"
Four	"	"	"	2.00	"

In such cases this company will collect from such consumer a minimum rate of one dollar and fifty cents ($1.50) per month, inclusive of the charge for use, cleaning and repairing of the meter.

When a meter is placed otherwise than at the request of the consumer, this company shall be entitled to collect water rates equal to at least the minimum rates otherwise assessable against the
947 consumer.

If any consumer after a meter has been put in at his request discontinues or abandons the use of the same, he shall pay this company five dollars ($5.00) for removing the meter, except for meters five-eight-s inch and under, where no removal charge will be made; provided, that the company may at its option continue such meter in place.

If a meter gets out of order and fails to register, the consumer will be charged at the average daily consumption as shown by the meter when in order, unless otherwise provided; but the meter will be repaired without unreasonable delay.

These provisions shall apply to meters set heretofore or hereafter.

Rule XVII.

Rates and Manner of Payments.

1. All rates are payable at the company's office, and in all cases, except where the supply is taken through a meter or counter, will be collected in advance and within (15) days of becoming due, as follows: For miscellaneous and domestic purposes, January, April, July and October 1st, in quarterly payments. Bills for monthly consumers will be rendered on the first of each month for the current month. At the same time meter and elevator bills will be presented for the preceding month. For all transient or special service, the full rate will be collected in advance in all cases, except that for building purposes it may be collected in partial payments, upon advance estimates, at the discretion of the company. No charge for a period of less than one year will be made for water furnished for lot and block property or the irrigation of acre property.

948 2. In all occupied premises every private fountain, bath, water-closet, wash-basin, sink or other fixture, whether used or not, will be deemed and held as used, and will be charged for so long as such fountain, hydrant, bath, water-closet, sink or other fixture shall remain connected with the water pipes.

3. No abatement of water rent will be allowed by reason of removal, disuse or diminished use, or vacant premises, unless notice thereof is left at the office of the company at the time when such change takes place.

4. Breakage or non-use of pipe or fixtures by accident cannot be accepted as furnishing any claim for rebate or reduction nor shall any rebate be made for a temporary closure or vacation of premises during the term of any contract.

5. Water rates will not be refunded under any circumstances, but privileges may be transferred from one premises to another for the same party upon application and consent at the office of the company; provided, that no credit shall be given to extend beyond the period paid for at the vacated premises.

6. In case of non-payment of the water rate within fifteen (15) days after becoming due, the supply will be discontinued, and will not be again renewed until full and satisfactory settlement of all arrearages shall be made, together with the sum of one dollar for turning on and off.

Penal Code.

SEC. 624. Every person who wilfully breaks, digs up, obstructs or injures any pipe or main for conducting gas or water, or any works erected for supplying buildings with gas or water, or any ap-

949 purtenances or appendage therewith connected, is guilty of a misdemeanor.

SEC. 625. Every person, who with intent to defraud or injure, opens or causes to be opened, or draws water from any stop-cock or faucet by which the flow of water is controlled, after having been

notified that the same has been closed or shut off for specified cause by order of a competent authority, is guilty of a misdemeanor.

Punishment of misdemeanor.—Fine of not more than $500 or imprisonment in the county jail for not longer than six months, or both.

950 The San Diego Land & Town Co.

Have for sale 40,000 acres of ranch lands, city lots in National City, city lots in San Diego, and suburban homes in Chula Vista.

(Endorsed:) Petitioners' & Protestants' Exhibit "D" Filed Oct. 9/97 Will H. Holcomb clerk. By J. W. Dodge, deputy. S. D. L. & T. Co. *vs.* Jasper. U. S. C. Ct. *No. 3 (a)* Geo. J. Leovy special examiner.

951

OFFICIAL TIME CARD

No. 19,

Taking effect January 1, 1891.

NATIONAL CITY & OTAY RAILWAY,

THE

POPULAR ROUTE

From San Diego to the following especial places of interest:

NATIONAL CITY, CHULA VISTA,

SWEETWATER DAM (Highest in America)

LA PRESA, ONEONTA,

and

TIA JUANA (OLD MEXICO).

Stations and Rates of Fare from San Diego.

Main line.	Dis.	Fare.
San Diego, L St.	.....	0c.
San Diego 25th St.	.....	5c.
San Diego, 28th St.	1.89	5c.
San Diego, 31st St.	2.23	5c.
San Diego, Una St.	.....	5c.
City limits	3.73	5c.
National City 8th St.	.....	10c.
Nat. City, 3d Ave.	.....	10c.
Nat. City, 18th St.	.....	10c.
Nat. City Land Co.'s	5.60	10c.
Nat. City, Kimball's.	.....	10c.
Nat. City, "Terrace".	.....	10c.
Sweetwater Junct'n.	7.56	15c.
Chula Vista.	8.97	20c.
Fourth St. siding.	10.29	25c.
Otay	12.26	30c.
Madison's	.....	35c.
La Punta.	.....	35c.
Tibbetts'	.....	45c.
Buck's.	.....	45c.
Ware's	.....	50c.
Tia Juana Heights	18.19	55c.
Tia Juana	18.93	55c.

Sweetwater branch.	Dis.	Fare.
Sweetwater Junct'n	7.56	15c.
Munger's ranch.	.....	20c.
Bonita	10.51	25c.
Bonnie Brae.	.....	30c.
Sunnyside.	12.20	30c.
Highlands	.....	35c.
Sweetwater dam.	13.35	35c.
La Presa	15.36	40c.

Oneonta branch.	Dis.	Fare.
Tia Juana Junct'n.	14.50	40c.
Oneonta	16.32	45c.

Commutation tickets.—20 per cent. discount to points south of National City. Extra discount to residents of Chula Vista.
10 per cent. discount between National City and San Diego.

GEO. J. LOCKIE,
Acting General Manager, N. C. & O. Ry.

23153

San Diego and National City.

952 *South Bound.*

Leave San Diego.	Leave 31st St.	Leave C. limits.	Arrive Nat'l City.
9.00 a. m.	9.09 a. m.	9.15 a. m.	9.25 a. m.
10.00 a. m.	10.09 a. m.	10.15 a. m.	10.25 a. m.
1.00 p. m.	1.09 p. m.	1.15 p. m.	1.25 p. m.
2.00 p. m.	2.09 p. m.	2.15 p. m.	2.25 p. m.
4.05 p. m.	4.14 p. m.	4.20 p. m.	4.30 p. m.
5.20 p. m.	5.29 p. m.	5.35 p. m.	5.45 p. m.
9.30 p. m.	9.39 p. m.	9.45 p. m.	9.55 p. m.

North Bound.

Leave Nat'l City.	Leave C. limits.	Leave 31st St.	Arrive San Diego.
8.09 a. m.	8.19 a. m.	8.25 a. m.	8.34 a. m.
9.05 a. m.	9.15 a. m.	9.21 a. m.	9.30 a. m.
11.50 a. m.	12.00 m.	12.06 p. m.	12.15 p. m.
1.25 p. m.	1.35 p. m.	1.41 p. m.	1.50 p. m.
3.20 p. m.	3.30 p. m.	3.36 p. m.	3.45 p. m.
4.35 p. m.	4.45 p. m.	4.51 p. m.	5.00 p. m.
7.01 p. m.	7.11 p. m.	7.17 p. m.	7.26 p. m.

San Diego, Chula Vista, and Fourth St. Siding.

North Bound.						Stations.		*South Bound*				
P. M.	P. M.	P. M.	P. M.	A. M.				A. M.	P. M.	P. M.	P. M.	P. M.
.....	7.26	.....	5.00	8.34	Ar.	.....San Diego 5th & L.....	Lv.	10.00	2.00	4.05	5.20	9.30
.....	7.17	.....	4.51	8.25	Ar.	.....31st St.....	Lv.	10.09	2.09	4.14	5.29	9.39
.....	7.11	.....	4.45	8.19	Ar.	.....City limits.....	Lv.	10.15	2.15	4.20	5.35	9.45
10.45	7.01	.....	4.35	8.09	Ar.	.....National City.....	Lv.	10.30	2.30	4.35	5.45	9.55
10.35	6.52	5.09	4.21	8.02	Ar.	.....Sweetwater Jc.....	Lv.	10.40	2.40	4.43	5.53	10.05
10.25	6.43	5.01	4.12	7.55	Ar.	.....Chula Vista.....	Lv.	10.50	2.50	4.51	6.01	10.15
10.20	6.38	4.56	4.07	7.50	Lv.	.....Fourth St. siding.....	Ar.	10.55	2.55	4.56	6.56	10.20

953

For further information, time cards, etc., inquire at

Freight and passenger station, cor. Fifth and L Sts., San Diego,

or

General offices at National City.

San Diego, Sweetwater Dam & La Presa.

North Bound.					Stations.		*South Bound.*		
P. M.	P. M.	A. M.		Dist.		Dist.		A. M.	P. M.	P. M.
7.26	3.45	12.15	Ar.	15.36	San Diego, 5th & L	.....	Lv.	9.00	1.00	4.05
7.01	3.20	11.50	Lv.	9.76	National City	5.60	Lv.	9.30	1.30	4.35
6.52	3.05	11.35	Lv.	7.80	Sweetwater Jc	7.56	Lv.	9.40	1.40	5.09
5.59	2.40	11.00	Lv.	2.01	Sweetwater dam	13.35	Lv.	10.05	2.05	5.34
5.49	2.30	10.50	Lv.	.....	La Presa	15.36	Ar.	10.15	2.15	5.44

San Diego and Oneonta.

North Bound.					Stations.		*South Bound.*			
		P. M.		Dist.		Dist.		A. M.		
.....	.....	1.50	Ar.	16.32	San Diego, 5th & L	.....	Lv.	10.00	.....	.....
.....	.....	1.25	Lv.	10.72	National City	5.60	Lv.	10.30	.....	.....
.....	.....	1.10	Lv.	8.76	Sweetwater Junct	7.56	Lv.	10.40	.....	.....
.....	.....	1.00	Lv.	7.35	Chula Vista	8.97	Lv.	10.50	.....	.....
.....	.....	12.46	Lv.	4.06	Otay	12.26	Lv.	11.04	.....	.....
.....	.....	11.26	Lv.	1.82	Tia Juana Junct'n	14.50	Lv.	11.13	.....	.....
.....	.....	11.20	Lv.	.....	Oneonta	16.32	Ar.	11.19	.....	.....

San Diego and Tia Juana.

North Bound.					Stations.		*South Bound.*			
P. M.	P. M.	A. M.		Dist.		Dist.		A. M.	P. M.	P. M.
5.00	1.50	8.34	Ar.	18.95	San Diego, 5th & L	.....	Lv.	10.00	2.00	5.20
4.30	1.25	8.09	Lv.	13.35	National City	5.60	Lv.	10.30	2.30	5.45
4.21	1.10	8.02	Lv.	11.39	Sweetwater Junc	7.56	Lv.	10.40	2.40	5.53
4.12	1.00	7.55	Lv.	9.98	Chula Vista	8.97	Lv.	10.50	2.50	6.01
3.59	12.46	7.40	Lv.	6.69	Otay	12.26	Lv.	11.04	3.04	6.15
3.50	12.37	7.31	Lv.	4.45	Tia Juana Jc	14.50	Lv.	11.26	3.12	6.24
3.33	12.20	7.14	Lv.	.....	Tia Juana	18.95	Ar.	11.43	3.28	6.41

Commutation Tickets.

20 per cent. discount to points south of National City.
10 per cent. discount between National City and San Diego.

Extra discounts to residents of Chula Vista.

954 EXTRAORDINARY INDUCEMENTS OFFERED TO MANUFACTURERS.

Large tract of land is reserved in the center of

NATIONAL CITY, TERMINUS OF THE A., T. & S. F. R. R.,

TO BE DONATED

To locating manufacturers. Railroad switches through entire tract. Very accessible to deep-water wharves. Transcontinental rate point. Rail connection with all wharves and railroads in San Diego and National City. Ample pure, cheap water. Low rents and reasonable prices for dwelling lots.

Property of

SAN DIEGO LAND & TOWN CO., who are also owners of CHULA VISTA,

Five thousand acres, subdivided into five-acre tracts; to be sold only to those who will improve the same at once; improvements to consist of a house to cost not less than $2,000. Entire tract covered with water mains, filled with pure mountain water from the Sweetwater reservoir, (capacity 6,000,000,000 gallons.) National City & Otay railway in operation through center of property with frequent trains to San Diego and National City. More than fifty modern houses completed and twenty-five more under contract to be completed within six months.

LOW PRICES FOR THE FIRST FEW WHO LOCATE.

20,000 ACRES IRRIGATED FRUIT AND FARM LANDS

Immediately adjacent to San Diego and National City. Abundance of water in pipes at $3.50 per acre per year. Choice locations in Sweetwater valley at $250.00 per acre, less a rebate of $50.00 per acre for each acre planted to citrus trees and maintained for one year.

For information, terms and prices, inquire of

WM. G. DICKINSON,
General Manager, San Diego Land & Town Co.,
National City, Cal.

63—193

955 (Endorsed:) Protestants' Exhibit "D" Filed Oct. 13/97. Will H. Holcomb Co. clerk, by W. H. Storey, deputy U. S. C. Ct. S. D. L. & T. Co., *vs.* Jasper No. 4 (*a*) Geo. J. Leovy, special examiner.

956 PETITIONERS' EXHIBIT "L." Filed Oct. 13, '97. Will H. Holcomb, Co. Clerk, by W. H. Storey, Deputy.

Eight- Annual Report of the Board of Directors of the San Diego Land and Town Company to the Stockholders, December 31, 1894.

957 (14) and (16).

San Diego Land and Town Company.

General Balance Sheet, December 31, 1894.

Assets.

Company's lands:

Town company's addition to San Diego		$119,361.25
Boone Brothers' addition		280.00
Hensley's addition		200.00
New San Diego		3,500.00
Horton's addition		10,631.25
Middletown		2,460.00
Cleveland's addition		6,200.00
Otay ranch		100,000.00
Chula Vista		318,090.00
National ranch		573,425.80
Sectional lands		1,556.80
Arnold and Choate's addition		720.00
Pueblo lands		141,445.80
Hoel & Richter's addition		10,100.00
Abel's addition		400.00
Ex-mission lands		1,126.50
South Chollas addition		29,240.00
Mannasse & Schiller's addition		13,481.25

National City town lots:—

National avenue	$8,200.00	
First	9,930.00	
Second	11,940.00	
Third	11,000.00	
Fourth	10,575.00	
Fifth	10,150.00	
958 Sixth	17,990.00	
Seventh	14,835.00	
Eight-	23,150.00	
Ninth	16,250.00	
		134,020.00
		$1,466,238.65

Dike at National City		$8,097.67
Chula Vista cottages		10,400.08
International hotel		13,657.00
Office building No. 1, National City		5,705.22
Sweetwater dam		344,080.91
Pipe line		544,154.72
Pipe line No. 2		948.28
Live stock		840.00
Meter account		1,877.98
Tool account		259.93
Material on hand		5,266.18
Contracts and agreements		192,236.45
Notes receivable *western office*		3,258.64
Accounts receivable		7,378.68
Development account, No. 4		520.22
150 shares Sweetwater Fruit Co. stock		15,000.00
National City and Otay Railway bonds (held by trustee)		451,000.00
National City and Otay railway		29,883.36
Cash:		
Treasurer, Boston	$1,428.58	
Assistant treasurer, National City	818.39	
		2,246.97
959 Fruit development accounts		20,890.50
Nursery		5,858.12
Packing-house		5,400.00
(16.)		
Horticultural department		138,962.71
Packing-house accounts		3,791.69
		$3,277,953.96

(15) and (17).

Liabilities.

Capital stock	$2,250,000.00
7 % debenture bonds of 1900	500,000.00
Unpaid coupons	175.00
Notes payable	2,000.00
Pipe-line extension to ex-mission	147.67
Pipe-line extension to Kimball's	804.37
Water department	49,699.28
Water rights	9,415.00
Unclaimed wages	476.10
Vouchers approved, western office	2,827.50
Income account	462,409.04
	$3,277,953.96

(Endorsed:) Received and filed this 14 day of Oct. 1897 Will H. Holcomb clerk of the board of supervisors San Diego county. By J. M. Dodge, deputy. S. D. L. & T. Co. *vs.* Jasper *et al.* No. 5 (a) Geo. J. Leovy special examiner.

960 Circuit Court of the United States, Ninth Circuit, Southern District of California. In Equity.

H. R. MANDELL and THE BOSTON SAFE DEPOSIT and Trust Company, a Corporation, Plaintiffs,
versus
THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Defendants.
} 660, Consolidated.

Decree.

This consolidated cause came on to be further heard at this January A. D. 1897 term and due notice having been given to all parties to the record in said cause, and all said parties being in court, H. R. Mandell, party plaintiff, by H. J. Stevens The Boston Safe Deposit and Trust Company, party plaintiff, by H. J. Stevens The San Diego Land and Town Company, party defendant, by its counsel Works & Works, and the defendant Charles D. Lanning by Works & Works, and the court having considered the report of Charles D. Lanning, receiver for this court of the estate of said defendant land company, and the court having read and considered the bill of complaint filed by the said Boston Safe Deposit and Trust Company and the answer filed by the said defendant land company in said consolidated cause and the answer filed by said receiver in said consolidated cause, and having heard the arguments of counsel thereon, and it ap-
961 pearing to the court from a certified copy on file in this cause, that the circuit court of the United States, district of Massachusetts, did on April 5, 1897 make a decree substantially as prayed for in said bill of complaint, said decree ordering sale of the entire trust estate in the possession of such receiver; and it appearing to the court upon such consideration and argument and upon the whole record in said consolidated cause that the interests of all concerned in said trust estate will be protected and equity done by the granting of the prayers of said bill of complaint and that therefore the prayers of said bill of complaint should be granted substantially as prayed for, and all parties consenting thereto:

It is by the court ordered, adjudged and decreed,

I.

That the said decree of the said circuit court of the United States, district of Massachusetts, dated April 5, 1897 be and hereby is approved, ratified and confirmed by this court.

II.

That the said Boston Safe Deposit and Trust Company is a corporation duly organized and existing under the laws of the Com-

monwealth of Massachusetts with its principal place of business in Boston in said Commonwealth.

III.

That the said San Diego Land and Town Company is a corporation duly organized and existing under the laws of the State of Kansas with a usual place of business in said Boston. That the property of the said San Diego Land and Town Company consists principally of real estate situated in the county of San Diego in the State of California. That certain of the personal property of the said San Diego Land and Town Company consisting of $451,000 in
962 par value of the six per cent. bonds of the National City & Otay Railway Company, a corporation organized under the laws of the State of California, is in the possession of the said Boston Safe Deposit and Trust Company in said Boston as trustee under a certain debenture deed of trust executed by said San Diego Land and Town Company on Feb. 1, 1890, as hereafter in this decree set out. That certain other personal property of said San Diego Land and Town Company of the alleged value of $10,000 is in the possession of a receiver of the estate of said San Diego Land and Town Company in said Boston, said receiver having been appointed as hereafter in this decree set out.

IV.

That this court in the above-entitled cause did by its decree dated September 30, 1895, duly adjudge that the said San Diego Land and Town Company was insolvent and did further by its said decree appoint Charles D. Lanning of said Boston to be receiver for this court *pendente lite* of the entire estate of said San Diego Land and Town Company. That said decree of this court was made in approval and confirmation of a decree of the circuit court of the United States for the district of Massachusetts, dated September 4, 1895;— that said Lanning duly entered upon his duties as such receiver, has not been discharged as such receiver and is now as such receiver in possession and administration of the entire estate of said San Diego Land and Town Company, excepting the said bonds of said railway company belonging to said San Diego Land and Town Company, which bonds as aforesaid are in the possession of said trust company in said Boston.

V.

That by a decree of this court duly made on November 5,
963 1895, in approval and confirmation of a decree by said Massachusetts court, dated October 22, 1895, said receiver was authorized to issue, sell and dispose — his receiver's certificates of indebtedness to an amount not exceeding $275,000, said receiver's certificates to be used for certain purposes set out in said two last-mentioned decrees; that said entire amount of $275,000 of said receiver's certificates were duly issued in accordance with said last-mentioned decrees and also in accordance with the decree of this court dated April 7, 1896 which last-mentioned decree was made in

approval and confirmation of a decree of said Massachusetts court, dated March 23, 1895; that $3500 of said receiver's certificates have been duly paid, cancelled and retired by said receiver, and that so much in amount of the remaining amount of $271,500 of said receiver's certificates with interest thereon as may be duly outstanding at the time of sale of said trust estate as provided hereafter in this decree are and shall be a valid and subsisting first lien on the said entire trust estate.

VI.

That by a decree of this court duly made on November 5, 1896, in approval and confirmation of a decree of said Massachusetts court dated October 6, 1896, said receiver was duly authorized to issue, sell and dispose of his receiver's certificates of indebtedness to be known as receiver's certificates of indebtedness, second series, to an amount not exceeding $50,000 to be used for certain purposes set out in said two last-mentioned decrees; that said receiver has duly issued, sold and disposed of $17,250 of his said receiver's certificates of indebtedness, second series; that so much in amount of said receiver's certificates of indebtedness, second series, together
964 with the interest due thereon as may be duly issued and outstanding at the time of sale of said trust estate as hereafter to be provided in this decree, are and shall be a valid and subsisting second lien on said entire trust estate subsequent only to the lien securing the receiver's certificates mentioned in the preceding paragraph, being paragraph V of this decree.

VII.

That said San Diego Land and Town Company by a debenture deed of trust dated February 1, 1890 and recorded in the office of the recorder of said county of San Diego in Book 56 of Mortgages, page 201 *et seq.*, of real property records, did convey to said Boston Safe Deposit and Trust Company, certain property as set forth in said debenture deed of trust and consisting of said bonds of said National City and Otay Railway Company, the Sweetwater dam, reservoir and pipe system so called, and the Otay ranch so called, said Sweetwater dam, reservoir and pipe system and said Otay ranch being situated in said county of San Diego:—all as specifically set out and described in said debenture deed of trust, said conveyance being made to the said Boston Safe Deposit and Trust Company as trustee to secure a proposed issue of $500,000 of the seven per cent. debenture bonds of said San Diego Land and Town Company;—that the entire amount of $500,000 of said debenture bonds being 1000 bonds of the par value of $500 each, have been duly issued by said San Diego Land and Town Company and are now outstanding against said San Diego Land and Town Company;—that said San Diego Land and Town Company defaulted on said debenture bonds by the non-payment of the interest due thereon February 1, 1896;—that said default has continued for more than a period of six months;—

that the holders of said debenture bonds represented by said
965 Boston Safe Deposit and Trust Company as trustee as aforesaid, are therefore entitled to have said debenture deed of trust foreclosed and the said property conveyed thereby and not duly released in accordance therewith sold for the satisfaction of said debenture bonds;—that the said debenture deed of trust therefore ought to be and shall be foreclosed;—and that the said property conveyed thereunder and not duly released as aforesaid be sold as hereafter in this decree provided.

VIII.

That said San Diego Land and Town Company by an indenture of trust and mortgage dated March 1, 1895, and recorded in the office of said recorder, in Book 91 of Mortgages, page 1 *et seq.*, of real property records, and Book 5 of Chattel Mortgages, page 369 *et seq.*, did convey to said Boston Safe Deposit and Trust Company certain property consisting of said bonds of the said National City and Otay Railway Company, said Sweetwater dam, reservoir and pipe system, and said Otay ranch, which said railway bonds, Sweetwater dam, reservoir and pipe system and Otay ranch were conveyed subject to all rights arising under said debenture deed of trust, and said last-mentioned property further consisting of all other of the real and personal property of said San Diego Land and Town Company, situated in said county of San Diego, excepting the real estate belonging to said San Diego Land and Town Company situated in the Jamacha irrigation district so called and in the Linda Vista irrigation district so called, both said irrigation districts being in the said county of San Diego, all as specifically set forth and described in said indenture of trust and mortgage, said conveyance being made to said Boston Safe Deposit and Trust Company
966 as trustee to secure a porposed issue of one million dollars ($1,000,000) of the six per cent. mortgage bonds of said San Diego Land and Town Company;—that two hundred and fifty thousand dollars ($250,000) of the said six per cent. bonds of said San Diego Land and Town Company being 500 bonds of the par value of $500.00 each have been duly issued by said San Diego Land and Town Company;—that at least $500.00 of said last-mentioned bonds are now outstanding against said San Diego Land and Town Company; that the said San Diego Land and Town Company has defaulted on such of said last-mentioned bonds as may be outstanding by the non-payment of the interest due thereon March 1, 1896;—that said last-mentioned default has continued more than a period of ninety days;—that the holders of said last-mentioned bonds that may be outstanding as represented by said Boston Safe Deposit and Trust Company as trustee as aforesaid are therefore entitled to have said indenture of trust and mortgage foreclosed and the property conveyed thereby and not duly released in accordance therewith sold for the satisfaction of said last-mentioned bonds;—that said indenture of trust and mortgage therefore ought to be and shall be foreclosed;—and that the said property conveyed thereunder and

not duly released as aforesaid be sold as hereafter in this decree provided.

IX.

That said Charles D. Lanning be and he hereby is appointed receiver for this court, under said debenture deed of trust and under said indenture of trust and mortgage of the property of said San Diego Land and Town Company conveyed by and under said debenture deed of trust and by and under said indenture of trust and mortgage, this appointment hereby made to be in confirmation and ratification of the appointment of such receiver originally
967 made in this cause as hereinbefore set forth and to be effective and operative without any further acceptance by said receiver. That said receiver is hereby exonerated from filing any other or further bond or stipulation of suretyship in addition to the bonds already given by the receiver and on file in this cause.

X.

That the said trust estate in the possession of such receiver being the entire property belonging to the said San Diego Land and Town Company, whether real, personal or mixed and whether legal or equitable and including the said property so conveyed by and under said debenture deed of trust and by and under said indenture of trust and mortgage and not duly released in accordance with the said debenture deed of trust and said indenture of trust and mortgage, and further including all personal property, stocks, bonds, securities, contracts, notes, and chattels of every name and nature belonging to said San Diego Land and Town Company be sold by said receiver as an entirety at public auction in accordance with the said decree of said Massachusetts court dated April 5, 1897, and in accordance with this decree and the orders of this court made and to be made providing for the sale of said trust estate said s-le to be made for the purpose of foreclosing said debenture deed of trust and said indenture of trust and mortgage and of paying and discharging and raising funds to pay and discharge all just claims of every name and nature against said estate.

That said sale shall be made at the front door of the office building of the said San Diego Land and Town Company in the city of National City in said county of San Diego.

That said sale shall be made between the hours of ten a. m. and one p. m. on the 14th day of June A. D. 1897.

968 That prior to such sale so to be made, said receiver shall give due notice thereof by publishing notice three times a week for six successive weeks, the last publication to be not more than twelve nor less than six days before the day originally set for said sale so to be made, said notice to be published for said period and as aforesaid in one daily newspaper published in the said city of Boston and in one daily newspaper published in the said city of San Diego in the said county of San Diego.

That such receiver shall give like due notice of such sale so to be made, by mailing notice postage prepaid to all stockholders of record

in said San Diego Land and Town Company so far as the same may be ascertained, said notice to be so mailed at least thirty days before the day originally to be set for said sale.

That two adjournments of such sale not exceeding ten days each may be made upon public announcement at the place of sale without further notice or further action of this court and that such further adjournment may be had as this court may order, any adjourned sale to be had and made at the place fixed for the original sale.

That said notice so to be published and so to be given to said stockholders shall state the title of this cause in this court and in said Massachusetts court and shall state that pursuant to decrees of said courts of given date, the entire estate of said San Diego Land and Town Company will be sold by said receiver as an entirety at public auction on the day fixed, subject to adjournment for cause. That said notice shall further describe the property to be sold as aforesaid by stating that it includes the property conveyed under said debenture deed of trust of February 1, 1890 and the
969 property conveyed under said indenture of trust and mortgage of March 1, 1895, giving reference to the place of record and book and page of record of said debenture deed of trust and said indenture of trust and mortgage.

That said notice shall further state that detailed lists of said property may be examined by intending bidders at the offices of such receiver in the said city of Boston and said city of National City;—and said receiver shall keep at his said offices detailed lists of the property to be sold, which lists shall during business hours be open to the inspection of intending bidders.

XI.

That said sale of said entire trust estate as above provided in paragraph X of this decree be made for an amount not less than the aggregate amount of

1. The principal and interest to date of sale of the receiver's certificates of indebtedness against said trust estate duly issued as above set forth in paragraphs V and VI of this decree and duly outstanding at said date.

2. The principal and interest to date of sale of all the seven per cent. debenture bonds of said San Diego Land and Town Company and of all the six per cent. mortgage bonds of said San Diego Land and Town Company duly issued as above set forth in paragraphs VII and VIII of this decree and duly outstanding at said date.

3. The amount of all bills and claims arising under the receivership, if any, against said estate, as may be determined by this court before the above date of sale.

4. Such other amounts, if any, as this court may fix before sale.

That upon sale of said trust estate as aforesaid, payment
970 of an amount equal to the sum of the amounts called for by sections 1 and 2 of this paragraph, being paragraph XI of this decree be made either in cash or in said receiver's certificates and said outstanding bonds of said San Diego Land and Town Company with interest to date of sale;—that payment of the amount

specified in section 4 of this paragraph or any part thereof as specified or to be specified by this court may be made in cash or in the purchaser's bond in form and amount satisfactory to this court binding the purchaser to pay for the purposes set out in said section 4 or any thereof any sum up to the amount fixed in said bond;—and that payment of the balance of said aggregate amount shall be made in cash;—that upon such sale and as a part of the terms thereof, the purchaser shall give bond in form and amount satisfactory to this court binding the purchaser to pay the interest on said seven per cent. debenture bonds and six per cent. mortgage bonds of said San Diego Land and Town Company and on said outstanding receiver's certificates accruing between the date of sale of said estate as herein provided for and the date of conveyance of said estate by said receiver in pursuance of such sale;—that upon sale as aforesaid, at least twenty-five per cent. of the purchase price be deposited at time of sale, all or part of said twenty-five per cent. in a certified check of a national bank and the remainder or all of said twenty-five per cent. in said receiver's certificates and in said seven per cent. debenture bonds and said six per cent. mortgage bonds of said San Diego Land and Town Company, or in any or all of said receiver's certificates and bonds at par and interest to said date as aforesaid, said deposit to be returned in the event that the sale be not approved by this court.

XII.

971 That this court may at any time before sale had of said trust estate, specifically fix such amounts as are mentioned in sections 3 and 4 of paragraph XI of this decree.

That said aggregate amount as aforesaid and as mentioned in said paragraph XI, be fixed, ascertained and announced at time of sale on the day fixed therefor, including adjournments, interest on said receiver's certificates and said bonds of said San Diego Land *Land* and Town Company, to be reckoned to date of any adjourned sale.

That, sale being had as aforesaid, said receiver shall report to this court the bids had at said sale with the receiver's recommendation thereon together with copies of the deed or deeds, conveyance or conveyances which the said receiver proposes to execute in pursuance of said sale, said report to await the confirmation of this court.

XIII.

That the proceeds of said sale of said trust estate to be had as aforesaid shall be applied in the following order:

1. To the payment of the expenses and charges of the receivership and such other amounts as may before sale be fixed by this court in accordance with section 4 of paragraph XI hereof.

That if any of the amounts mentioned in this section 1, of paragraph XIII of this decree shall be covered by the purchaser's bond as provided in said paragraph XI hereof, then the first application of proceeds of sale other than such purchaser's bond shall be to the payment of the remaining amounts fixed by and under said section 4 of paragraph XI hereof.

2. To the payment of all bills and claims against the said estate as set out in section 3 of paragraph XI hereof.

972 3. To the payment of principal and interest on and for all said receiver's certificates issued as set out in paragraph V hereof and duly outstanding at date of such sale.

4. To the payment of principal and interest on and for all said receiver's certificates duly issued as set out in paragraph VI hereof, and duly outstanding at date of said sale.

5. To the payment of principal and interest on and for the said seven per cent. debenture bonds and the said six per cent. mortgage bonds duly issued as set out in paragraphs VII and VIII hereof, and duly outstanding at date of such sale.

6. To such payment to said San Diego Land and Town Company or to the stockholders thereof as this court and said Massachusetts court may direct.

XIV.

That the parties in this consolidated cause and the said receiver may if necessary apply to this court for further orders and direction not inconsistent herewith in the matter of the sale herein provided for, such further orders and directions to be entered at the foot of this decree and to be a part hereof.

ROSS,
Circuit Judge.

Decree entered and recorded April 14th 1897.

WM. M. VAN DYKE, *Clerk.*

(Endorsed:) Circuit court of U. S. so. dist. of California.
973 In equity 660 consolidated. H. R. Mandell, Boston Safe Deposit & Trust Company *v.* San Diego Land & Town Company. Decree ordering foreclosure, appointing receiver, and ordering sale. Filed Apr. 14 1897 Wm. M. Van Dyke, clerk.

I, Wm. M. Van Dyke, clerk of the circuit court of the United States, for the southern district of California, do hereby certify the foregoing to be a full, true and correct copy of an original decree made, filed and entered by said court April 14th, 1897, in the cause entitled H. R. Mandell and The Boston Safe Deposit and Trust Company, a corporation, complainants, *vs.* The San Diego Land and Town Company, a corporation, and Charles D. Lanning, as receiver thereof, defendants, No. 660 consolidated, and remaining of record therein.

Attest my hand and the seal of said circuit court, this 28th day of September, A. D. 1897.

[SEAL.] WM. M. VAN DYKE, *Clerk.*

(Endorsed:) Petitioners' Exhibit — Filed Oct. 13/97 Will H. Holcomb clerk by J. M. Dodge deputy No. 660 consolidated Copy Decree ordering foreclosure appointing receiver and ordering sale S. D. L. & T. Co. *vs.* Jasper *et al.* U. S. C. Ct. No. 6 (*a*) Geo. J. Leovy special examiner.

974 In the Circuit Court of the United States, Ninth Circuit, Southern District of California, Southern Division.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants.

Now comes the above-named appellant, The San Diego Land and Town Company, by John D. Works, Bradner W. Lee and Lewis R. Works, its counsel, and say that in the record and proceedings in the above-entitled matter there is manifest error in this, to wit:

1. The circuit court of the United States, ninth circuit, southern district of California, erred in holding and deciding that the petitioners who initiated the proceedings before the board of supervisors were not the only parties in interest.

2. The said court erred in holding and deciding that upon the entry of default in this court against the said petitioners for failure to answer the bill herein, the complainant was not entitled to a decree setting aside the rates and declaring the ordinance fixing them void.

3. The said court erred in refusing to enter a decree *pro confesso* against the said petitioners and in favor of the complainant and appellant on the default entered against them herein, for failure to answer the bill of complaint.

4. The said court erred in holding and deciding that the ordinance passed by the board of supervisors of San Diego county sought to be set aside in this action, was not procured in such a way as to amount to a deception upon the board of supervisors.

5. The said court erred in holding and deciding that the rates fixed and established by the ordinance of the board of super-
975 visors of San Diego county, complained of and sought to be set aside in this action, were not so unreasonably low as to amount to the taking of the complainant's property without just compensation, contrary to the provisions of the Constitution of the United States.

6. The said court erred in dismissing the complainant's bill of complaint.

7. The said court erred in rendering the judgment in favor of the defendants and against the complainant appealed from in this action.

Wherefore, the said San Diego Land and Town Company prays that the decree and order of the said circuit court of the United States, ninth circuit, southern district of California, southern division, be reversed.

JOHN D. WORKS,
BRADNER W. LEE,
LEWIS R. WORKS,
Counsel for Appellant.

(Endorsed:) Original. No. 768. U. S. circuit court, ninth circuit, southern district of California. San Diego Land and Town Company, *vs.* James A. Jasper, *et al.* Assignment of errors. Filed Oct. 1 1901 Wm. M. Van Dyke, clerk Works & Works, rooms 420 to 425 Henne building, Los Angeles, Cal. solicitors for complainant.

976 In the Circuit Court of the United States, Ninth Circuit, Southern District of California, Southern Division.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,

vs.

JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. G. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants.

The above-named complainant, The San Diego Land and Town Company, considering itself aggrieved by the order and decree entered on the 26th day of August, 1901, in the above-entitled proceeding, dismissing its bill, does hereby appeal from said order to the Supreme Court of the United States, and it prays that its
977 appeal may be allowed, and that a transcript of the record and proceedings and papers upon which said order and decree was made, duly authenticated, may be sent to the Supreme Court of the United States.

WORKS & WORKS,
Solicitors for Complainant.

And now, to wit: on the 1st day of October, 1901, it is ordered in open court that the appeal be allowed as prayed for.

ROSS,
Circuit Judge.

(Endorsed:) Original. No. 768. U. S. circuit court, ninth circuit, southern district of California. San Diego Land and Town Company *vs.* James A. Jasper, *et al.* Appeal. Filed Oct. 1 1901 Wm. M. Van Dyke, clerk. Works & Works, rooms 420 to 425 Henne building Los Angeles, Cal. solicitors for complainant.

978 At a stated term, to wit, the July term, A. D., 1901, of the circuit court of the United States of America, of the ninth judicial circuit, in and for the southern district of California, south-

ern division, held at the court-room in the city of Los Angeles on Tuesday, the first day of October, in the year of our Lord one thousand nine hundred and one.

Present: The Honorable Erskine M. Ross, circuit judge.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER ET AL., Defendants. } No. 768.

On motion of John D. Works, Esq., of counsel for complainant, it is ordered that the appeal of said complainant The San Diego Land and Town Company, from the order and decree entered on the 26th day of August, 1901, in the above-entitled proceeding, dismissing its bill, and from the final decree pursuant to said order signed, filed entered and recorded on the 25th day of September, 1901, to the Supreme Court of the United States, be, and the same hereby is allowed, and that a transcript of the record and proceedings and papers upon which said order and decree was made, duly authenticated, be sent to the Supreme Court of the United States; it is further ordered that the amount of the bond to be given by the appellant be, and the same hereby is fixed at three hundred (300) dollars, and that the bond in that amount tendered by the appellant be, and the same hereby is approved.

979 In the Circuit Court of the United States, Ninth Circuit, Southern District of California, Southern Division.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. G. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, D. C. Collier, Defendants.

Know all men by these presents: That we, the San Diego Land and Town Company, as principal, and the Fiedlity and Deposit Company of Maryland, a corporation having its principal place of business in the city of Baltimore, State of Maryland, having a paid-up capital and surplus of $1,150,000.00, duly incorporated under the laws of said State, for the purpose of making guarantee or
980 becoming surety upon bonds or undertakings as required or authorized by law, and licensed by the insurance commis-

sioners of the State of California, and having complied with all the requirements of the law of said State of California regulating the formation or admission of such corporations to transact such business in said State, (C. C. P. 1056–'7), as surety, are held and firmly bound unto the above-named defendants, James A. Jasper, Charles H. Swallow, William Justice, John Griffin, and Howard M. Cherry, (members of and constituting the board of supervisors of the county of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. G. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Theo. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, and D. C. Collier, in the penal sum of three hundred dollars ($300.00), to be paid to the said parties, for the payment of which well and truly to be made we bind ourselves, and each of us, our and each of our heirs, executors, administrators and successors, jointly and severally, firmly by these presents,

Sealed with our seals and dated the 30 day of September in the year of our Lord, 1901.

Whereas the above-named San Diego Land and Town Company has prosecuted an appeal to the Supreme Court of the United States to reverse the decree rendered in the above-entitled suit by the judge of the circuit court of the United States, for the ninth circuit, southern district of California;

Now, therefore, the condition of this obligation is such that if the above-named San Diego Land and Town Company shall prosecute said appeal to effect and answer all damages and costs if it
981 shall fail to make said appeal good, then this obligation shall be void; otherwise, the same shall be and remain in full force and virtue.

SAN DIEGO LAND & TOWN COMPANY,
By JOHN E. BOAL, *General Manager.*
FIDELITY & DEPOSIT CO. OF MARYLAND,
[SEAL.] By HERBERT J. GOUDGE.

Signature of Herbert J. Goudge attested and corporate seal affixed by

WM. DIETERLE, *Agent.*

Sealed and delivered and taken and acknowledged this 30 day of Sept. 1901, before me,

_____,
Notary Public.

Approved.

ROSS,
Circuit Judge.

(Endorsed:) Original. No. 768. U. S. circuit court, ninth circuit, southern district of California. San Diego Land and Town Company, *vs.* James A. Jasper, *et al.* Bond. Filed Oct. 1 1901 Wm. M. Van Dyke, clerk Works & Works rooms 420 to 425 Henne building, Los Angeles, Cal. solicitors for complainant.

982 In the Circuit Court of the United States of the Ninth Judicial Circuit in and for the Southern District of California.

THE SAN DIEGO LAND AND TOWN COMPANY, a Corporation, Complainant,
vs.
JAMES A. JASPER, CHARLES H. SWALLOW, WILLIAM JUSTICE, John Griffin, and Howard M. Cherry (Members of and Constituting the Board of Supervisors of the County of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. G. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, and D. C. Collier, Defendants. } No. 768.

I, Wm. M. Van Dyke, clerk of the circuit court of the United States of America, of the ninth judicial circuit, in and for the southern district of California, do hereby certify the foregoing nine hundred and eighty-one (981) typewritten pages numbered from
983 1 to 981 inclusive, and comprised in two volumes, to be a full, true and correct copy of the record, pleadings, opinions of the court, papers, assignment of errors, and of all proceedings in the above and therein entitled cause, and that the same together constitute the transcript of the record on appeal to the Supreme Court of the United States, in said cause.

I do further certify that the cost of the foregoing record is $609.00 the amount whereof has been paid me by The San Diego Land and Town Company, a corporation, the appellant in said cause.

In testimony whereof, I have hereunto set my hand and affixed the seal of the said circuit court of the United States of America, of the ninth judicial circuit, in and for the southern district of California, this eighth day of November, in the year of our Lord one thousand nine hundred and one, and of the Independence of the United States the one hundred and twenty-sixth.

Seal U.S. Circuit Court, Southern Dist. Cal., 1886.

WM. M. VAN DYKE,
Clerk of the Circuit Court of the United States of America of the Ninth Judicial Circuit in and for the Southern District of California.

984 UNITED STATES OF AMERICA, ss:

To James A. Jasper, Charles H. Swallow, William Justice, John Griffin, and Howard M. Cherry (members of and constituting the board of supervisors of the county of San Diego, State of California), and M. T. Hall, A. J. Jenkins, E. P. Vaughan, J. A. Fritz, P. H. Evans, Thomas May, Lizzie Bowman, John Sirl, John C. Moore, G. D. Woolsey, Samuel Pedler, Colonel C. G. Winslow, S. R. Williams, Byron Gillett, Chas. W. Schaffer, Jos. Hefliger, M. Christiansen, D. Freeman, Mary E. Sharp, E. J. Cahill, Frederick M. Smith, Ranford Worthing, William Weidekamp, G. L. Good, William Rock, C. P. James, Thos. J. Hayes, William Black, A. C. Mouser, P. E. Dahlgrist, C. N. Bowers, Henry Lohr, G. Y. Gray, E. E. Shaffer, and D. C. Collier, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be held at the city of Washington in the District of Columbia, on the 29th day of November A. D., 1901, pursuant to an order allowing an appeal entered in the clerk's office of the circuit court of the United States of America, of the ninth judicial circuit, in and for the southern district of California, from an order entered on the 26th day of August 1901, and from the final decree pursuant to said order signed, filed, entered and recorded on the 25th day of September, 1901, in that certain cause, being in equity, No. 768, wherein The San Diego Land and Town Company, a corporation, is complainant and appellant and you are defendants and appellees, to show cause, if any there be, why the decree rendered against said appellant in the said order allowing appeal mentioned, should not be corrected, and speedy justice should not be done to the parties in that behalf.

Witness the Honorable Erskine M. Ross, United States circuit judge for the ninth judicial circuit, this 1st day of October, A. D. 1901, and of the Independence of the United States the one hundred and twenty-sixth.

ERSKINE M. ROSS,
United States Circuit Judge for the Ninth Judicial Circuit.

985 [Endorsed:] 768. In the Supreme Court of the United States. The San Diego Land and Town Company, a corporation, appellant, *vs.* James A. Jasper, *et al.*, appellees. Citation. Filed Oct. 8 1901 Wm. M. Van Dyke clerk —— —— deputy.

Service of the within citation is hereby acknowledged this 7" day of October, 1901.

T. L. LEWIS,
A. HAINES,
Solicitors for Defendants and Appellees.

Endorsed on cover: File No. 18,321. S. California C. C. U. S. Term No. 193. The San Diego Land and Town Company, appellant, *vs.* James A. Jasper *et al.* Filed November 18", 1901.

64—193